



UNIVERSITÀ POLITECNICA DELLE MARCHE
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Master's Degree in International Economics and Commerce

**A strategic, financial and economic analysis of
Infratel**

Un'analisi strategica, finanziaria ed economica di Infratel

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Sommario

L'obiettivo della tesi è fornire un'analisi strategica e di settore di Infratel, società in-house del Ministero dello Sviluppo Economico italiano.

Lo studio sarà basato sull'analisi di bilancio della suddetta società per un periodo di 10 anni (2011-2020) in modo tale da valutare l'aspetto finanziario ed economico della stessa, nonché la relativa redditività, solidità e liquidità in modo da delineare le motivazioni e le principali implicazioni delle scelte strategiche adottate.

A completamento dell'analisi verranno analizzate e messe in luce le strategie relative alla banda larga negli altri paesi europei, in modo tale da poter comparare alcune delle scelte strategiche adottate relativamente alle infrastrutture delle telecomunicazioni.

Il focus sarà sulla strategia che l'Italia ha implementato, attraverso Infratel, nella realizzazione del Piano Strategico Banda Larga e Ultra Larga. La Strategia BUL verrà presentata ed analizzata in modo tale da definire il contesto nella quale Infratel opera. Basando su questo lo studio, verrà analizzata la posizione che Infratel in questo periodo di innovazioni ed incertezze ha e la sua possibile evoluzione futura, principalmente tenendo conto delle problematiche relative al costo del personale.

Punto focale sarà anche l'analisi dell'utilizzo della forma "in-house" al fine di poter valutare se la strategia italiana è stata fino ad ora vincente o meno.

Abstract

The thesis will provide a strategic and sectoral analysis of Infratel, an in-house company of the Italian Ministry of Economic Development.

The study will be based on an analysis of the company's balance sheet for a period of 10 years (2011-2020) in order to assess the financial and economic performance, as well as its profitability, solidity and liquidity in order to outline the motivations and main implications of the strategic choices made.

To complete the analysis, broadband strategies in other European countries will be analysed and highlighted, so as to be able to compare some of the strategic choices adopted in relation to telecommunications infrastructures.

The focus will be on the strategy that Italy has implemented, through Infratel, in the implementation of the Broadband and Ultra-Broadband Strategic Plan. The Italian BUL Strategy will be presented and analyzed in order to define the context in which Infratel operates. Based on this, the study will analyze the position Infratel is in at this time of innovation and uncertainty and its possible future evolution, mainly taking into account issues related to personnel costs.

The focal point will also be the analysis of the use of the "in-house" form in order to assess whether the Italian strategy has been successful so far or not.

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In Chapter 1, the analysis will start with a context overview, talking about the European digital situation and their strategies with particular attention to the differences between Italy and Denmark, the most digitalized country in Europe today. While in Italy the State through the in-house Infratel, fully coordinates the

implementation of public telecommunications infrastructure, in Denmark the strategy is more focused on private investments.

After that, an introduction and description of the in-house companies is made, in order to underline the peculiarities of the type of company with which the Italian State decided to implement the broadband and ultra-broadband plans. In-house companies are private law companies, usually established in the form of joint stock companies (SpAs), but working as the operational arm of a public body, a sort of branch acting in the interest of the State, which controls them as if they were its own. Other types of company forms comparable to in-house are also introduced so that it is possible to understand the reasons why the State has chosen to use this form of company.

Chapter 2 will be an introduction into the company itself and the context in which it was born and continues to operate.

A long run analysis of the European and Italian strategies for the implementation of the broadband and ultra-broadband is made. It will be possible to understand why Infratel is so important for the evolution and digitalization of the Italian country and the results its activity has brought. Then, the intervention models used by Infratel on the basis of the national plans will be described.

Finally, an analysis of governance and strategy will allow us to understand the structure and methods used by Infratel and how these have affected the accounts.

Chapter 3, which represents the core of the thesis, will discuss about the strategy of the company on the basis of the Balance Sheet and the Profit and Loss Statement for a period of 10 years (2011-2020) together with the achievement reached in the BUL strategy construction status.

This empirical analysis will describe the financial position of the company that, operating in the telecommunications infrastructure sector at national level, have to sustain a lot of costs due to the expensive investment on the coverage of the Italian territory.

In addition, the company will be economically analyzed, describing the trends in the main items of the Profit and Loss account during the period under consideration. For better understanding and analysis, all data are contextualized over the reporting period in the BUL strategy.

CHAPTER I

TELECOMMUNICATION INDUSTRY AND DIGITAL TRANSFORMATION

1.1 The European digital situation

Infrastructures, such as roads, bridges, railways, telecommunication and digital networks are not just a static element of our landscape, a simple platform on which goods, data and people move; they are also an engine of economic growth, attracting investment, increasing productivity and fostering long-term growth. Infrastructures are a key tool through which states can increase their connectivity, leading to more trade, faster information and better use of resources. Infrastructures make it possible to organize people and resources in a functional sense, overcoming the boundaries drawn by political geography. In a Europe that wants to become an area in which goods and people move faster and more freely, the network of physical and digital infrastructures linking the various countries is of fundamental importance. Each country has a different approach to infrastructure investment. Advanced countries are concerned with maintaining and upgrading existing infrastructure. Emerging countries, on the other hand, need new infrastructure to provide essential services to a growing population and improve their development prospects.

In the European Union (EU), in the context of achieving a truly cohesive and integrated common market, infrastructures occupy a privileged position. The EU's objectives with regard to infrastructure are various: to complete the links that do not yet exist, especially at cross-border level; to reduce the differences in the quality of infrastructure between the different member states; to harmonise national operating standards and requirements; to reduce greenhouse gas emissions in the transport sector by 60% by 2050 and so on so forth. To achieve these goals, the priority in the coming years is to complete the so called core TEN-T network¹. The EU's action in the field of infrastructure also extends to the energy sector (where Europe is aiming for greater energy efficiency, reduction of emissions and security of supply) and digital connectivity (with the extension of broadband to public services, logistics hubs and businesses).

Digital technologies enable businesses to gain competitive advantage, improve their services and products and expand their markets (Digital Economy and Society Index 2021).

For what concerns the European digitalization, all EU Member States are making progress, but the overall picture of digitalization across Member States is mixed. The level of convergence between the Member States is increasing but the gap

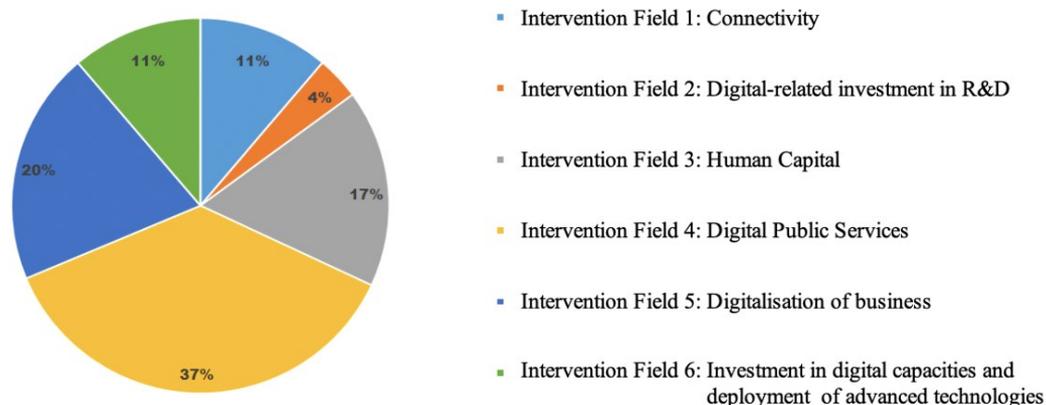
¹ TEN-T programme consists of hundreds of projects whose ultimate purpose is to ensure the cohesion, interconnection and interoperability of the trans-European transport network, as well as access to it. For more information: <https://ec.europa.eu/inca/en/ten-t/ten-t-projects>

between the EU's frontrunners and those with the lowest scores in the DESI is all too large. The Digital Economy and Society Index (DESI) summarises indicators on Europe's digital performance and tracks the progress of EU countries. The European Commission has been monitoring Member States' digital progress through the DESI reports since 2014. The DESI, each year, allows to identify the areas requiring priority action as well as thematic chapters offering a European-level analysis across key digital areas, essential for underpinning policy decisions. The COVID-19 pandemic has had a significant impact in the EU's economy and on EU society. It has significantly changed the role and perception of digitalization in our economies and societies, accelerating the evolution. Taking into account the pandemic situation, DESI 2021 has been adjusted to reflect the two major policy initiatives set to have an impact on the digital transformation in the EU in the coming years: the Recovery and Resilience Facility (RRF)² and the Digital Decade Compass³.

² Regulation (EU) 2021/241 of the European Parliament and the Council establishing the Recovery and Resilience Facility was adopted in February 2021. With a budget of Eur 723.8 billion, it will support large-scale public investments and reforms by Member States to mitigate the economic e social impact of the COVID-19 pandemic and make European economies and societies more sustainable, resilient and better prepared for the challenges and opportunities of the green and digital transition. For more information: <https://digital-strategy.ec.europa.eu/en/policies/desi>

³ In March 2021, the commission adopted the 2030 Digital Compass: the European Way for the Digital Decade Communication. It sets out the EU's digital ambitions and lays out its vision for digital transformation by 2030. <https://digital-strategy.ec.europa.eu/en/policies/countries-digitisation-performance>

Figure 1: Digital investments in the RRF (plans adopted by the Council as of 28/10/2021).

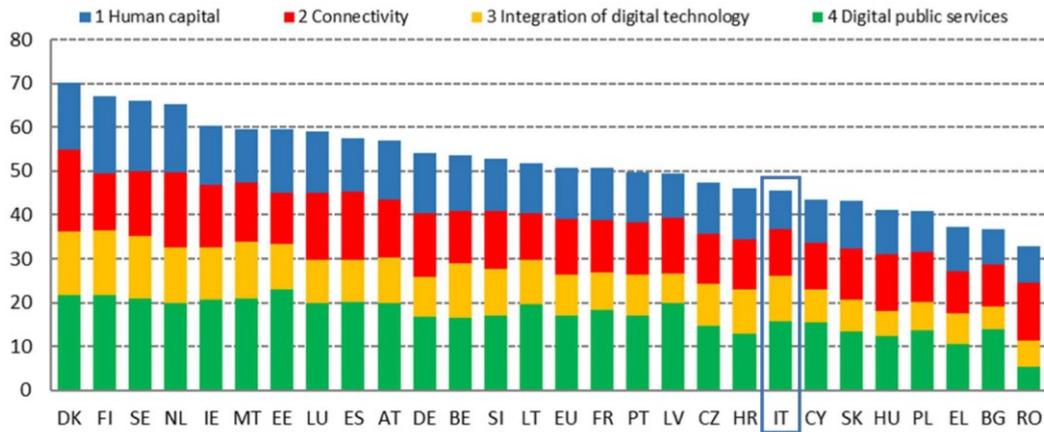


Source: European Commission (2021).

The 2030 target of the Digital Compass is that at least 80% of citizens have at least basic digital skills; while 84% of people used the internet regularly in 2019, only 56% possessed at least basic digital skills.

The figure below shows the 2021 DESI ranking of Member States. Denmark, Finland, Sweden and the Netherlands have the most advanced digital economies in the EU, followed by Ireland, Malta and Estonia. Romania, Bulgaria and Greece have the lowest DESI scores. Italy is also not in a good position, in fact, as you can see from the figure below, it's almost at the bottom of the ranking.

Figure 2: Digital Economy and Society Index, 2021.



Source: DESI 2021, European Commission.

1.1 Broadband connectivity in Europe

According to the Digital Compass target, all populated areas should have 5G coverage by 2030. The Netherlands and Denmark are the most advanced countries, with 80% coverage. Due to the pandemic situation, it is expected that the availability of very high capacity digital connectivity will increase more sharply in the coming years. The deployment of 5G wireless networks will also depend on optical fibre backhaul infrastructures' providing very high quality wireless connectivity.

Fixed coverage is close to universal in the majority of EU with less than 3% uncovered households in 19 Member States. NGA is available in the vast majority of EU homes (87%) but only 60% can benefit from such services in rural areas.

VHCN⁴ coverage almost doubled in the last two years. In rural areas, growth was lower but still substantial, from 4% to 28% between 2013 and 2020.

1.2 Strategies of the most digitalized countries in Europe

The European telecommunications sector has been radically transformed in the past 25 years: from a group of state monopolies to a set of increasingly competitive markets. There is a variety of conditions that influence the success of broadband roll-out: demand side measures, supply side measures, regulatory and organizational measures and transparency measures. European successful National Broadband Plans (NBPs) consider their respective starting positions and describe concrete measures that take advantage of the individual strengths and define measures to mitigate the effect of disadvantages. The Member States' NBPs differ substantially regarding their content. What is clear is that there is no one-size-fits-all solution for broadband strategies across Europe. In fact, the NBPs seem not to be transferrable, while some measures could be applied under similar conditions.

1.3 The Italian situation and its strategy

Italy ranks 20th out of 27 EU Member States in the 2021 edition of the Digital Economy and Society Index (DESI).

During 2020, Italy made some progress in both coverage and uptake of connectivity networks, with a particularly notable increase in the take-up of connectivity services

⁴ When the connection speed is considerably higher than 200 Mbps download and can reach up to Gbit/s, we speak of NGA-VHCN (Very High Capacity Networks).

offering speeds of at least 1 Gbps. In any case, due to the pandemic situation, the pace of fiber deployment has slowed between 2019 and 2020. Therefore, further efforts are needed to increase the coverage of ultra-high capacity networks and 5G to encourage their deployment. One of the reasons why Italy lags behind other European countries is the fact that, in terms of human capital, compared to the European average, it has very low levels of basic and advanced digital skills. In human capital, Italy ranks 25th of 27 EU countries. Only 42% of people aged 16-74 years have at least basic digital skills (56% in the EU) and only 22% have above basic digital skills (31% in the EU). The percentage of ICT specialists in Italy is 3.6% of total employment, remaining below the EU average (4.3%). (DESI, 2021). It is interesting to underline that Italy's performance is closer to the EU average on female ICT specialists.

In fact, in recent years, the pressing need to act to reduce the major gaps in digital skills gained increasing attention. For this reason, in 2020, Italy launched its first National Strategy for Digital Skills, which main aim is to narrow the gaps with other EU countries for what concern digitalization.

In connectivity Italy ranks 23rd among EU countries in connectivity. 61% of households subscribe to fixed broadband (77% EU average). Concerning fast broadband next generation access (NGA) coverage, the number of households included is 93% above the EU average of 87%. On fixed Very High Capacity Network coverage, the percentage of households covered was 34% in 2020; it

represents an increase of four percentage points compared to 2019, but still considerably below the EU average of 59%. FTTP coverage stood at 33.7% of households, increasing almost at the same pace as the EU average. Moreover, on the broadband price index, Italy's score of 74 did not change between 2019 and 2020 and remains higher than the EU average.

In recent years, Italy has pursued the EU connectivity targets through a combination of regulation and public policy, and measures to boost supply and demand. In particular, during 2020, with the aim also of a rapid response to the COVID-19 outbreak, the Italian authorities devoted particular attention to the demand side, setting up the first phase of the Voucher plan, which is dedicated to households with a low gross income giving them the possibility to upgrade their fixed lines with the help of a contribution.

Concerning the SMEs, Italy ranks 10th in the EU integration of digital technology. Most Italian SMEs have at least a basic level of digital intensity (69% , above the EU coverage of 60%). Italian enterprises perform very well in the use of e-invoices, but the use of big data is low. In terms of policy developments, the government revised and further extended the fiscal benefit, moving from hyper-depreciation to tax credits; results show that it stimulated investments in Industry 4.0 assets, although the uptake of the benefits was relatively higher among medium and large enterprises and largely concentrated in the North of Italy.

Italy ranks 18th in the EU in Digital public services; despite this, the use of digital public services remains relatively low. In fact, the share of Italian online users who resort to e-government services increased from 30% in 2019 to 36% in 2020. While this is notable increase, it remains well below the EU average of 64%. Anyway, during 2020 and 2021, there was a sharp acceleration in the adoption of major enabling platforms for digital public services. The number of digital identities issued (SPID) reached 20 million in April 2021, an increase of 400% compared to April 2019. This can be explained because Italy introduced a mix of obligations and incentives to boost the adoption of the main e-government platforms between 2020 and 2021.

Italy's strategy for dealing with the development of broadband and ultra-broadband in the territory was to set up an ad hoc company, wholly owned by the State: Infratel. Italy, in fact, adopted a national state aid scheme to support ultra-broadband in areas where market failure is present, thus giving priority to underdeveloped areas and/or those presenting more difficulties in evolving digitally. A planned total budget of EUR 4 billion composing of national and regional funds has been made available to build a passive public infrastructure managed with a wholesale-only model and opened to all the operators in areas where a market failure is present.

Analysing the strategies of the countries that have a better DESI than Italy, it's possible to note how this strategy is profoundly different from that of the first

country in the ranking, Denmark. Denmark's primary focus is on the roll-out of high-speed network infrastructure based on private investments. A key role is reserved for municipalities in coordinating and promoting the process in cooperation with telecommunication operators. Public funding is reserved for areas with poor broadband coverage, the Broadband Fund. This Fund aims at locals aggregating their demand to apply for financial assistance collectively. Moreover, the new 2021 strategy of Denmark, Digital Growth Strategy 2025, aims to support the development of a highly-skilled talent pool of qualified professionals, working towards improving the digital skills of children, and in general from an early age; bridging the skills mismatch and offering relevant training and skills to support individuals' development in today and tomorrow's labor market and improving access to skills training and program for small and medium sized enterprises, enabling them to exploit the commercial potential of new and emerging technologies.

From the brief analysis of this country's strategy, it can be seen that, unlike Italy, it highlights the importance of people, who represent the heart of the country's digital strategy.

1.4 In-house companies and Municipally Owned Corporations

As already mentioned, the Italian broadband strategy is based on an in-house company: Infratel.

In general, in-house or insourcing, is a term used in business to describe the utilization of internal resources rather than outsourcing for activities. Any activity that is going to be implemented in a company, requires an assessment by the management regarding costs and risks. Of course, there are pros and cons in both, outsourcing and insourcing. One of these, first of all is the involvement of a third party: this would reduce control over the activity. Moreover, the outside party may also have different standards, such as in the areas of data security, which could be a risk related to information. Also delays may occur. On the other hand, direct control generally guarantees better performance but at the same time generates a waste of costs and resources in carrying out the same activity. It has to be taken into account also the fact that in-housing guarantees work continuity and motivation. It is clear that sometimes the best choice is a mix of these two strategies.

In-house is a form of public service management which originated in Community case law, in which a public authority entrusts a public service to a company which, from a substantive point of view, is equivalent to one of its own branches. In-house providing, therefore, is an award made in derogation of the Community legislation on public contracts since no public tender is held for it.

The basic requirements of in-house providing are as follows:

- similar control: it's defined in Article 2 of the Consolidated Law on public companies as a situation in which the administration exercises "a decisive influence over both the strategic objectives and significant decisions of the subsidiary";

- prevalent activity: according to the Court of Justice, an in-house award exists when the services of a given undertaking are primarily intended for the local authority controlling that undertaking and the other activities are residual;
- total public participation.

It should be noted that for a long time the doctrine rejected the possibility that in-house companies could be subject to bankruptcy, as an entity equivalent to the public. The latest rulings⁵ however, have completely reversed the situation. As further confirmation, Article 4 par. 13 of D.L. n. 95/2012 and the new Art. 1 par. 3 del D.Lgs. n. 175/2016, allowing the activity to be carried out in the form of private companies, even if they have a public shareholding, means that they must assume the risk of insolvency and therefore, in the cases provided for, are subject to bankruptcy.

In order to understand the peculiarities and motivations that led the State to set up an in-house company, it is also necessary to analyze what other choices the State could have made in order to guarantee the construction of a national telecommunication infrastructure.

In fact, there are other types of company similar to in-house: one of these is the Public Private Partnership (PPP). PPP is “a contract for pecuniary interest concluded in writing whereby one or more contracting authorities grant to one or

⁵ Corte di Cassazione, Sez. I, sentenza n. 3196/2017 e Corte di Cassazione, sentenza n. 22209/2013.

more economic operators, for a fixed period depending on the duration of the amortization of the investment or the financing arrangements laid down, a set of activities consisting in the construction, transformation, maintenance and operational management of a work in exchange for its availability, or its economic exploitation, or the provision of a service connected with its use⁶. The aim is to find alternative financing to traditional instruments through a long-term relationship and a proper allocation of risk to private parties.

In the case of the construction of a national infrastructure, it presents two problems, for which this form was not adopted: it is not defined at Community level and it doesn't respect the presence of analogous control in the case of the participation, even in a minor form, of a private partner in the company, which, pursuing a different aim from that of the public party, could not be reconciled with it.

Another type of company comparable to in-house providing is the Golden Share. The term Golden Share refers to the legal institution under which a State, during and following a process of privatization of a public enterprise, reserves to itself special powers that may be exercised by the government during the process itself. This institution, like in-house providing, aims to protect the interest of the community in those companies that are generally involved in public utilities. The Golden Share does not stipulate a minimum percentage of the share capital that the

⁶ Art. 3 – Codice dei Contratti Pubblici.

State must hold in a company in order to exercise it. The share held by the State can be reduced to a single, symbolic share at most, and it gives the State power over strategic choices even when privatization is complete.

The main difference between in-house and Golden Share lies in the fact that while in in-house there is no transformation from public to private entity because it is born private and carries out its activity at the service of the public entity; Golden Share, on the contrary, results from a privatization of an originally public entity.

A final form of a company comparable to in-house is the Special Company.

According to article 114 of the TUEL, the Special Company is an instrumental body of the local authority with legal personality, entrepreneurial autonomy and its own statute, approved by the municipal or provincial council.

There are three main characteristics of this form of company:

- it has legal personality and financial autonomy from the administration which it belongs;
- it is an instrumental body of the local authority of reference: this means that the activity of the special company is totally aimed at the purpose (welfare and development of the community) of the body which set it up;
- it has entrepreneurial autonomy; it is subject to the principles of economy, efficiency, effectiveness and a balanced budget.

To sum up, both represent instrumental entities of the reference body and are characterized by a large degree of autonomy, however, while special companies are economic public bodies, in-house companies are publicly controlled companies.

This thesis will also discuss about Municipally Owned Corporations (MOC) which, as the name implies, are corporations owned by a municipality. They are typically “organizations with independent corporate status, managed by an executive board, appointed primarily by local government officials, and with majority public ownership” (Voorn et al., 2017). MOCs are increasingly utilized to provide local public services (i.e., transportation, water & sewerage services, refuse collection, electricity) (Voorn et al., 2017). A MOC’s income typically depends on user fees, while local bureaucracies and LGs rely on subsidies, taxes and local fees (Tavares & Camoes, 2007). Thus, MOCs seem to diversify the revenues of municipalities. User fees and taxes are not very dissimilar; however, since both end up obtaining revenue from citizens, the only distinction between them is the “user pays” principles. What matters more is the difference between them in the context of financial autonomy and the legal ways to cover deficit services. MOCs are not subject to consolidation under public financial law. Their debt is neither included in the local public debt nor limited by fiscal debt constraints. MOC’s, on the other hand, can expect local governments to compensate for their losses or bail them out. Such beliefs may motivate managers not to pursue efficiency, take larger risks, or borrow excessively. One of the main aspects of MOCs is their financial flexibility;

it extends the long-term debt capacity of municipalities by increasing their revenue diversification through taxes for the public services provided (Bialek-Jaworska 2021).

CHAPTER 2

STRATEGIC ANALYSIS OF INFRATEL: THE MANAGEMENT OF BUL

2.1 A long run analysis of the National Broadband Policy

Since 1995, information and communication technologies (ICT) have played a key role in increasing productivity and growth in the EU. Over the past three decades, technological convergence has blurred the boundaries between telecommunications, broadcasting and information technology.

Following the Lisbon strategy, that defines a sustainable economy as resource-efficient green and competitive, the Digital Agenda for Europe was conceived as one of the seven flagship initiatives⁷ of Europe 2020 Strategy adopted by the Commission. Launched in May 2010, the initiative aims to establish the key role of the use of ICT in order for Europe to meet its ambitious 2020 targets.

To ensure a fair, open and secure digital environment, the Commission has based its Digital Single Market Strategy on three pillars: providing consumers and businesses with better access to digital goods and services across Europe, create the ideal conditions for digital networks and services to thrive and maximize the growth

⁷ The seven flagship initiatives of Europe 2020 are: (1) Innovation Union, (2) Youth on the move, (3) Digital Agenda for Europe, (4) Resource efficient Europe, (5) An industrial policy for the globalization era, (6) An agenda for new skills and jobs and (7) European platform against poverty. Information related to this can be viewed at A compact summary of the DAE's: <https://www.europarl.europa.eu/factsheets/it/sheet/64/un-agenda-digitale-europea>

potential of the digital economy. The main objectives of the Digital Agenda for Europe were set in order to respect two related deadlines for broadband: universal coverage of the FGB networks by 2013, providing at least the minimum speed level of basic broadband and by 2020, complete the plan with the fully coverage of SGB/NGA networks, including fast broadband, with a performance equal to 20 Mbps, and ultra-broadband, performing at least 100 Mbps.

Within the framework of the Digital Agenda for Europe, Italy has developed its own national strategy, identifying priorities and modes of intervention, as well as actions to be carried out and measured on the basis of specific indicators, in line with the scoreboards of the Digital Agenda for Europe. The Italian Digital Agenda was elaborated in collaboration with the Conference of Regions and Autonomous Provinces.

Since the mid-2000's, in Italy, some regional governments have started to design and notify the European Commission, measures for the implementation of broadband infrastructures and digital services. These measures consisted of small scale projects, designed at the regional/local level without external synergies or sufficient resources. In most of cases, their performances were not worthy. Then, after a long time of control and oversight by the central Government, in June 2009 the Parliament approved Law n. 69/2009,⁸ called "Provisions for economic

⁸ Information related to this, can be viewed at: <https://www.parlamento.it/parlam/leggi/090691.htm>

development, simplification, competitiveness and civil process”, through which was elaborated a nation-wide public investment project, built on the institutional cooperation between the regional and central Governments, by identifying the areas without FGB services⁹. This kind of multilevel governance, centralized some key tasks at the ministerial level and foresaw the central coordination of the regional implementation.

The measure N 646/2009, was the first measure, targeted to rural areas eligible for the EAFRD¹⁰ funds; its main objective was related to brought basic broadband connectivity (2 Mbps or more) in rural or low-density areas, areas of complete market failure, called “white areas”.

The second measure, SA.33807, was formally submitted in October 2011 and cleared in May 2012, and it concerned both rural and non-rural areas, including more heterogeneous territories designated “grey areas”. The aim of this measure was oriented to the universal coverage with final downloading speeds in the range of 2-20 Mbps. The validity for the authorization granted under SA.33087 expired at the end of 2013, so a new authorization came up later with SA.38025.

Here there is a summary of the structure of the Italian plan for FGB.

⁹ Typically ADSL in urban areas and wireless solutions and 3G in rural ones.

¹⁰ European Agricultural Fund for Rural Development, is a main funding scheme belonging to the EU Common Agricultural Policies. More information here: https://ec.europa.eu/info/food-farming-fisheries/key-policies/common-agricultural-policy/rural-development_en

Table 1: The structure of the Italian plan for FGB.

SA MEASURE	FUNDING SOURCE & BUDGET (Mil. €)	TARGETED AREAS	MODELS OF INTERVENTION	FUNDS OWNERS & IMPLEMENTING PARTNER
N 646/2009 - Validity 12/2015	EAFRD (154.5)	Rural white areas eligible for EAFRD funds	Model A: direct public investment in backhaul network Model B: financing of wireless reception terminals	Ministry of Agriculture and Italian Regions
SA.33807 - Validity 12/2013	ERDF, EAFRD, ex. FAS, regional	Rural and not-rural white and grey areas eligible for EAFRD funds	Model A: direct public investment in backhaul network Model B: public subsidy for upgrading access network up to 20 Mbps Model C: financing of wireless reception terminals	Ministry of Economic Development (MISE) and Italian Regions. Infratel or regional in-house bodies.
SA.38025 - Validity 12/2017	ERDF, EAFRD, ex. FAS, regional	Rural and not-rural white and grey areas	Model A: direct public investment in backhaul network	Ministry of Economic Development (MISE) and Italian

		eligible for EAFRD funds	Model B: public subsidy for upgrading access network up to 30 Mbps Model C: financing of wireless reception terminals	Regions. Infratel or regional in-house bodies.
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Source: Our elaboration from Matteucci (2019).

In Italy, a four-year agreement between the Ministry of Communications and the company Sviluppo Italia S.p.A (now called Invitalia), was concluded on 22 December 2003 for the implementation of the activities relating to the upgrading of the infrastructure for broadband in the south of Italy, the cost of which has been agreed in the measure of 150 million euros. The agreement was concluded on the basis of article 8 of law n° 166 of 1 August 2002, which allows central governments to enter into an agreement with that company, with wholly public capital, for all technical activities, the economic and financial resources needed to carry out operations in the depressed areas of the country.

Invitalia, officially the Agenzia Nazionale per l'Attrazione degli Investimenti e lo Sviluppo d'Impresa S.p.A., is an Italian government agency established as a limited company and 100% owned by the Ministry of Economy and Finance. It was founded in 1999 as Sviluppo Italia S.p.A. following Legislative Decree n° 1 of 9 January 1999 approved by the Government of D'Alema, called "Reorganization of the

entities and companies of promotion and institution of the company Sviluppo Italia”, which provided for the merger of many Italian companies¹¹, engaged in the development of various sectors, such as tourism and agriculture, in a single company to relaunch the industrial development of Southern Italy after the disappearance of the Cassa del Mezzogiorno¹². In fact, originally, the investment program concerned the areas of the south, but later the intervention was extended to all areas of the national territory “to market failure”, characterized by the absence of an economic interest of private operators to invest in the construction of new broadband telecommunications infrastructures, in order to overcome the digital divide.

Invitalia was established with the aim of promoting productive activities, obtaining investments, encouraging employment initiatives and new entrepreneurship, developing the demand for innovation and the central business systems, provide support to central and local public administrations for financial planning, consulting on the management of national and Community incentives.

¹¹ Some of these companies were: SPI, Itainvest, IG (for youth entrepreneurship), Insud (for the promotion and development of tourism), Ribs (operational instrument of the Ministry of Agricultural Resources, Food and Forestry on agro-industrial sugar recovery), ENI-Sud, Finagra (for promotion in the agro-food sector).

¹² Cassa del Mezzogiorno or Cassa per opere straordinarie di pubblico interesse nell’Italia Meridionale, was an Italian public body created by the government of De Gasperi, to finance industrial initiatives aimed at the economic development of southern Italy, in order to bridge the gap with northern Italy. Source: https://it.wikipedia.org/wiki/Cassa_del_Mezzogiorno

Invitalia hold several shareholdings, among which those instrumental to its corporate mission, through “Invitalia Partecipazioni S.p.A.”, the holding management company of the Invitalia Group.

For the implementation of the program, Invitalia has set up two companies: one for infrastructure networks, Infratel Italia, and one for services, Innovation Ita.

In fact, the already mentioned agreement, also provided that Invitalia, for the implementation of the program, would use a company of purpose, controlled by the same Invitalia, which would then be the real entity implementing the program with the task of planning, design and implement and integrate broadband infrastructure. Subsequently, in addition to the convention concluded on 22 dicembre 2003, between the Ministry and Invitalia, a program agreement was concluded on 22 December 2005, lasting twenty years, this time between the Ministry of Communications and the society of purpose, Infratel S.p.A. This agreement has the function of defining the relations between the two contracting parties for the concrete implementation of the public infrastructure network in all the underdeveloped areas of the country.

First of all, in 2009, Infratel was in charge of the Piano Nazionale Banda Larga, born from the need to have a single national strategy to break down the digital divide, and responds to the first objective of the European Digital Agenda, that is to “guarantee to all citizens a coverage of the broadband connectivity service (at least 2 Mbps)”. The objective of the intervention was to bring access to broadband

in the white areas of the country, where the costs of infrastructure development could not be borne by the market, because economically unprofitable. These locations, have been identified through public consultations launched by Infratel and periodically updated.

The plan affected around 5 million people, who at the end of 2008, were still in a digital divide situation, giving them the availability and access to basic broadband service. The program was developed by drawing up the following operational plans:

- a first intervention within the regions of the Mezzogiorno;
- a second implementation operation to continue the infrastructure plans already started in the areas of southern Italy, and to allow the start of the intervention phases necessary for the areas under use in the central and northern part of the country;
- subsequent implementation through the planning, design and implementation of organic telecommunications networks; also constituted by the integration of existing infrastructures and compatible with the process of territorial infrastructuring.

The National Broadband Plan, was financed by:

- national funds: the “Fondo per lo Sviluppo e la Coesione” (FSC), is the main financial instrument through which policies for the development of economic, social and territorial cohesion and the removal of economic and social imbalances are implemented;

- EU funds: the “Fondo Europeo Agricolo per lo Sviluppo Rurale” (FEASR) which supports European rural development policy and, to this end, finances rural development programmes carried out in all Member States and regions of the Union and the “Fondo Europeo di Sviluppo Regionale” (FESR) which is one of the main financial instruments of the EU’s cohesion policy and its aim is to help even out the disparities between different levels of development of European regions and to improve living standard in the least favored regions;

- regional funds.

Analyzing the state of implementation of the interventions carried out with the resources drawn from the state budget, it emerges that: the first of the interventions, financed by the state budget, concerning the southern regions, began on July 2005 and had its deadline on 18 July 2008. However, delays occurred, according to Infratel, due to the loss of 50 million Euros in funding, which was reassigned in 2009, and to the execution of work not originally planned through the use of savings. These led to the completion of the work in early 2011, employing the entire amount originally allocated, amounting to 126,2 million Euros.

The second intervention concerning the central-northern regions, was launched in 2009, with a deadline of the end of October 2014. The end of this second intervention was postponed due to new works made possible by project savings. This delay has caused an underspending of the resources set aside for the planned investments, pairs to 84 million euros, of which used only 66,1 million.

A third operation, started in 2010, for an amount of approximately 99 million, is concluded at 31 December 2015. Orders relating to the regions of Abruzzo, Campania, Toscana, Molise, Piemonte, Veneto and Sardegna, have been delayed from a few months to more than a year. In fact, the scheduled date for the end of the work on this third intervention, was March 2013.

The fourth intervention, of total amount 69,6 million Euros, started in September 2012, is finished on the 31 December 2015, in line with the previewed times.

The fifth intervention, of 95,4 million Euros, started in July 2014 and the sixth intervention of 19,3 million Euros, started on 5 June 2014, ended at the end of 2017.

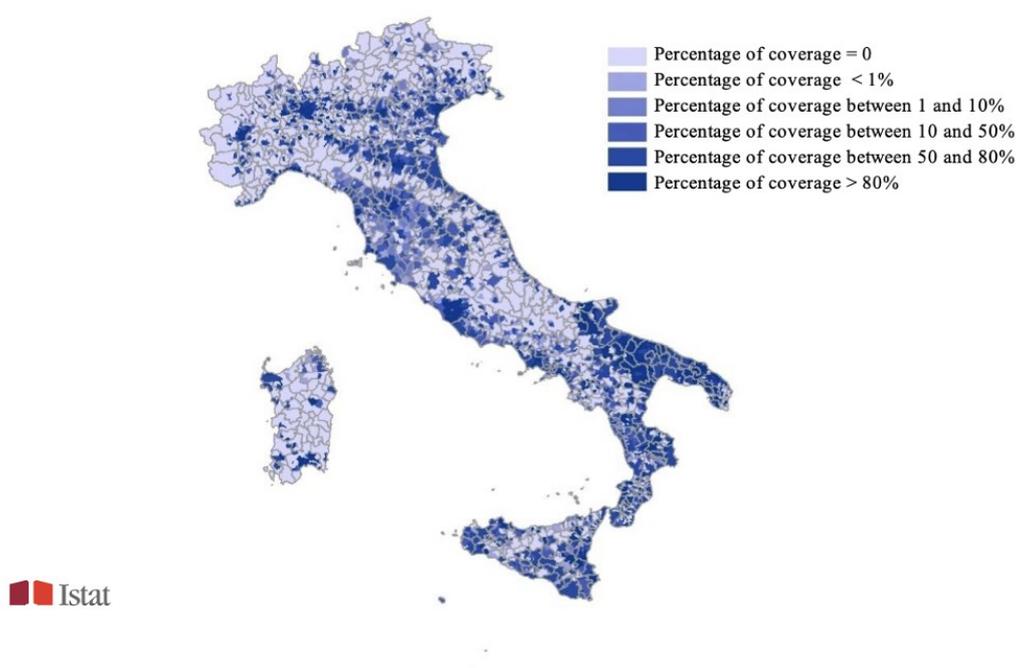
The 2017 annual report prepared by AGCOM¹³ states that at the end of 2016, the fixed network sector, since the beginning of the work carried out by Infratel relating to broadband, has improved significantly. In fact, from the point of view of coverage, the availability of fixed network access services at speeds of between 2 and 20 Mbits, has reached 97% of jobs. 35% of dwellings are reached by 30 Mbits and over. Active fixed broadband lines are close to 15.6 million units out of a total of just over 20 million lines. At the end of 2016, fixed broadband lines with speeds of 10 Mbit/s or more exceeded 50% of the total for the first time¹⁴.

¹³ AGCOM is the acronym of “Autorità per le Garanzie nelle Comunicazioni” which is an independent guarantee authority. The founding law entrusts the authority with the dual task of ensuring the correct competition of operators on the market and to protect the consumption of fundamental freedoms of users. <https://www.agcom.it>

¹⁴ Here the annual report of AGCOM for the year 2016: https://www.agcom.it/documents/10179/3058729/RELAZIONE+ANNUALE+2017_documento+completo.pdf/2021e7ba-8250-4239-9a46-5d82fdbf702c

Moreover, in 2017, the share of households accessing the Internet via broadband with a preference for fixed connection (ADSL, optical fibre, etc.) rose to 69,5% from 67,4% in 2016¹⁵.

Figure 3: Network infrastructure in local systems: access to fixed network Internet connections at least 30 Mbps per degree of coverage per municipality – Year 2017.



Source: Il ruolo dei dati nello sviluppo digitale in Italia, Mappare la banda larga: miglioramento dei servizi e innovazione. Giorgio Alleva, AGCOM – Roma, 21 maggio 2018.

<https://maps.agcom.it/arcgis/sharing/rest/content/items/2311ac4840b74f8993c19214d29556ac/data>

In conclusion, even though the National Broadband Infrastructure Plan, which was expected to be implemented in the three-year period 2011-2013, was expected to

¹⁵ Data from ISTAT: <https://www.istat.it/it/archivio/207825>

be approximately delayed, the broadband telecommunications network has contributed significantly to reducing the digital divide. In fact, during this period, the digital divide decreased from 15% at 31 December 2005, to 1,03% at 31 December 2015.

In line with the objectives set by the Digital Agenda for Europe, the Italian government has launched the strategic plan for ultra-broadband for Italy (Strategia per la Banda Ultralarga).

On 22nd March 2013, an act was signed between Mise, Invitalia and Infratel supplementing the program agreement of 5th July 2011 for the construction of infrastructures for ultrabroadband.

On 3rd March 2015 the Italian Government approved the Italian Strategy for Ultrabroadband, in order to reduce the already existing infrastructure and market gap, by creating more favorable conditions for the integrated development of fixed and mobile telecommunications infrastructures. The plan is born from the awareness that the investments of the private operators in Italy are insufficient to allow the attainment of the objectives of the Digital Agenda for Europe, as emerged from the public consultation conducted by Infratel on behalf of the Ministry of Economic Development, concluded in 2014. The strategy, in order to meet the targets set by the Digital Agenda for Europe for 2020, intends to:

- bring connectivity with a minimum of 100 Mbps for up to 85% of the Italian population,

- guarantee coverage of at least 30 Mbps to all citizens,
- coverage of at least 100 Mbps for offices and public buildings,
- bring high speed broadband in the industrial areas.

The strategy is also consistent with the 2025 objectives expressed by the Gigabit Society¹⁶, as it diffuses the optical fiber in a capillary way on the territory towards the residential users and makes available FTTH connections to the PA offices (schools, health centers etc.) and to the productive areas, also enabling the development of 5G.

The first phase of the strategy, whose implementation, as already mentioned, has been entrusted to the Ministry of Economic Development, which make use of the company in-house Infratel Italia Spa, is represented by the so-called “Piano Aree Bianche” and covers areas with market failure present in the entire national territory, in which no investments by private operators are present. Public intervention in these areas is considered necessary in order to correct the social and geographical inequalities generated by the absence of private initiative by operators, so as to allow greater social and territorial cohesion, through access to means of communication over the ultra-broadband network.

¹⁶ Communication COM (2016)-587 of the European Commission “Connectivity for a Competitive Digital Single Market – Towards a European Gigabit Society” of 14th September 2016. More information here: <https://digital-strategy.ec.europa.eu/en/library/connectivity-european-gigabit-society-brochure>

Infratel is responsible for creating a publicly-owned network that will be made available to all operators who want to activate ultra-broadband services for citizens and businesses. Infratel, in fact, once it has carried out the design, construction and management of the passive infrastructure, through a public tender procedure, will identify the concessionaire, making available the infrastructure, in wholesale mode and at prices defined by AGCOM. The TLC operator, which would be the concessionaire, will provide final services to citizens, businesses and public administration.

The “Piano Aree Bianche” will be followed by a second phase of the strategy, with interventions aimed at “Aree Grigie” and “Aree Nere” and the simulation of demand for ultra-broadband citizens, businesses and public administration. “Grey” and “Black” areas are the territories where one or more ultra-broadband networks are already present, in order to achieve, also in these areas, an important qualitative leap forward for the realization of ultra-fast gigabit networks.

The first phase, completed with regard to the completion of the works by Infratel Italia S.p.A., is currently under construction by Open Fiber S.p.A¹⁷, which is the concessionaire of the three tenders that Infratel made over time. The basic

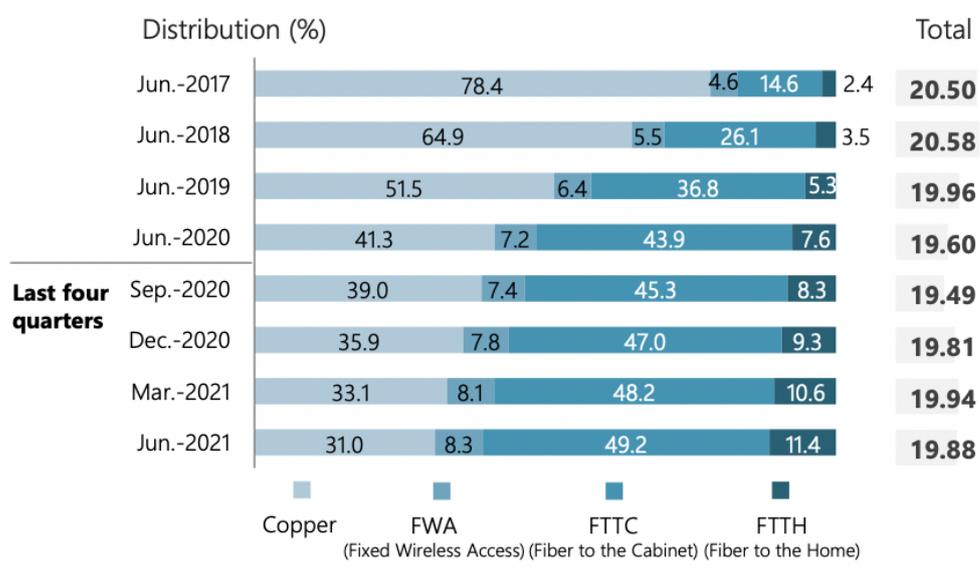
¹⁷ As an infrastructure player, Open Fiber is responsible for the implementation, management and maintenance of the fiber-optic network with Fiber to the Home technology (FTTH). Open Fiber is active exclusively in the wholesale market, and entrusts the distribution of services to our partners, represented by Italian and foreign telecommunication operators who will be responsible for selling the connection to the end user. Calls provide for the design, implementation, management and maintenance in wholesale mode of network access infrastructure both passive and active, for real estate units in the “White Areas”.

mechanism for awarding bids is an auction on the completion time of the infrastructure; the lot is awarded to the bidder with the most “future-proof” technical offer, offering the earliest reasonable completion date. In the event of failure to meet delivery deadlines, the contribution provided by the State will be proportionally reduced or refunded. Control over the conduct of the tenders will be exercised by Infratel. Verification of the services actually provided and of the technological choices will be entrusted to AGCOM.

The first phase has experienced some slowdowns in progress due to different factors, such as the difficulty in obtaining permits and authorizations from local authorities, the disputes established by the companies participating in the tenders or by the owners of the areas affected by excavation, the discontinuous provision of the necessary financial resources and the implementation of works originally not planned.

Anyway, this is how the distribution of the lines are evolved over the past years.

Figure 4: Evolution of the fixed lines in Italy.



Total lines	(no of lines)	(Δ %)	Distribution (Δ 2020-2021) percentage points
Quarterly change (March 2021 – June 2021)	-53 K accesses	-0.3 ↓	Copper: -10.3 ↓
Annual change (June 2020 – June 2021)	+279 K accesses	+2.0 ↑	FWA: +1.0 ↑
			FTTC: +5.4 ↑
4-Year change (June 2017 – June 2021)	-618 K accesses	-3.0 ↓	FTTH: +3.8 ↑

Source: AGCOM (2021):

<https://www.agcom.it/documents/10179/24676017/Allegato+28-10-2021/449b29d7-97a2-480e-bf71-f721a4cba5d3?version=1.0>

During the last year (from December 2019 to December 2020), the number of total lines is increased by 2.1%, DSL lines¹⁸ are decreased for 19.5% while other technologies are increased by 18.3%, even if the impact of the Coronavirus pandemic and the consequent restrictions imposed by the emergency regulations led to a substantial stoppage of work on construction sites from March 2020 onwards, which lasted until May. This shows how the digitalization in developing and how the new infrastructures are creating a new way of connecting through ultrabroadband lines.

Analysis of the results shows that at the end of March 2021, only 55% of households are covered by a network with speeds above 100 Mbit/s, and just under 23% are covered by a network capable of providing download speeds of up to 1 Gbit/s.

The table below shows the coverage level for households reached (and not reached) by Next Generation Access (NGA) networks on 31 March 2021, with details of the different download speeds.

Table 2: NGA and non-NGA coverage level at 31 March 2021.

NETWORK	PERCENTAGE OF FAMILIES REACHED
Non NGA (effective download speed < 30 Mbit/s)	6%
NGA (effective download speed > 30 Mbit/s)	89,6%

¹⁸ DSL stands for Digital Subscriber Line and it's a family of technologies that are used to transmit digital data over telephone lines. The bit rate of consumer DSL services typically ranges from 256 kbit/s to over 100 Mbit/s in the direction to the customer. https://en.wikipedia.org/wiki/Digital_subscriber_line

NGA (effective download speed 30-100 Mbit/s)	34,2%
NGA (effective download speed 100-300 Mbit/s)	32,5%
NGA (effective download speed 300-1000 Mbit/s)	22,9%
TOTAL (NGA + Non NGA)	95,6%

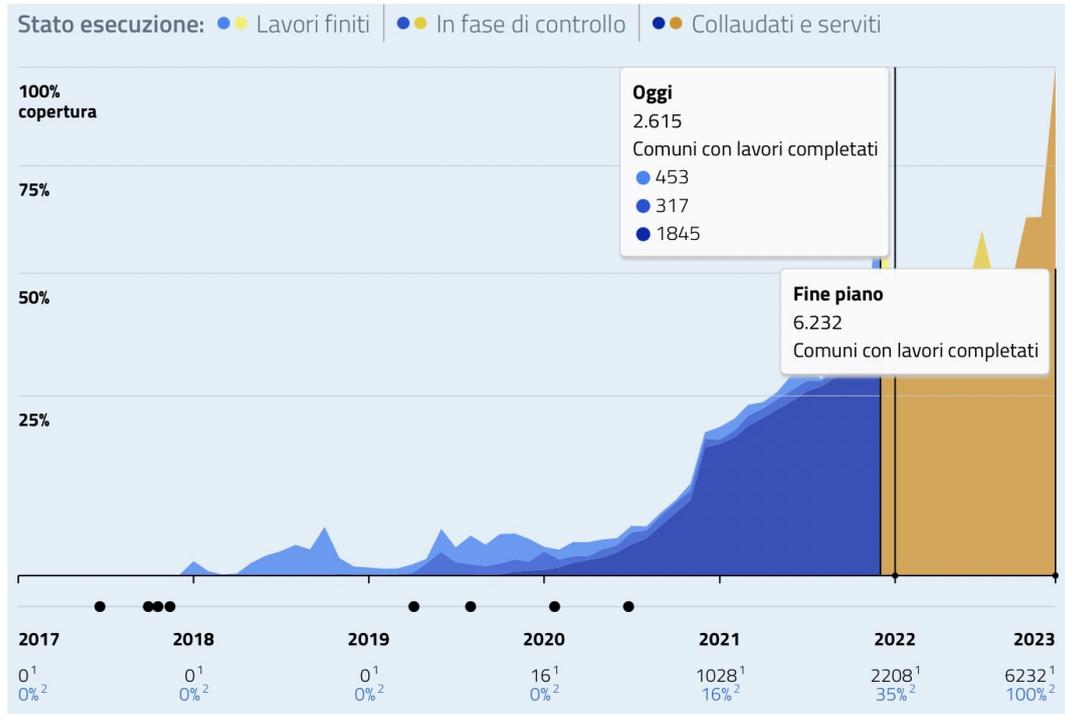
Source: MISE (2021)

https://www.mise.gov.it/images/stories/documenti/1622021525_strategia_bul.pdf

On May 25th 2021, for what concerns the “White Areas”, work began in 3.282 FTTH municipalities, of which 1.572 were completed. For 1.051 municipalities and their 1.014.000 real estate units, the testing was also successfully completed. 1.704 FWA sites were also completed.

On the activations side, it’s noted that, at the beginning of May 2021, are activated retail services in 27.677 real estate units (out of a total of 49.892 real estate units subject to activation request). They are altogether 102 the operators that have demanded the activations of the services to Open Fiber S.p.A. The initiatives undertaken by the government will ensure compliance by the concessionaire Open Fiber S.p.A. of a plan according to which all the planned real estate units, will be covered by the network by the year 2023.

Figure 5: Staus of the National Ultra Broadband Project with particular reference to the main operational phases related to the execution of the yards and completed yards, January 2022.



Source: Piano Strategico Banda Ultralarga (2022) <https://bandaultralarga.italia.it/evoluzione-piano/>

The average duration of the yards is pairs to 19 months, varying from region to region. Molise region turns out the region with the greater technical time in order to finish a yard in the month of December 2021.

Infratel today, is also engaged in the implementation of other plans related to the digitalization of the country; two of them are: “Piazza WiFi Italia”, in collaboration with the MiSe, which aims to allow all citizens to connect, free of charge and in a simple way to a free WiFi network spread throughout the national territory and

“Piano scuole connesse” which has as main objective to activate internet services and ultra-broadband at the schools in the Italian territory.

2.1.1 Models of intervention

As previously mentioned, for what concerns the Italian Broadband Strategy, the *Gazzetta Ufficiale dell’Unione Europea* in “Orientamenti comunitari relative all’applicazione delle norme in materia di aiuti di Stato in relazione allo sviluppo rapido di reti a banda larga” (EC, 2009/C 235/04)¹⁹, introduced a distinction between three areas of intervention, based on different characteristics related to the available connectivity level. This distinction has been applied also in the framework of the Italian Plan. These areas are divided into:

- White areas are areas where broadband infrastructures are non-existent and are not expected to be developed in the medium term (three years). Given the economic nature of these services, their provision is not always considered profitable by investors. In general, it is more profitable to introduce broadband networks when the potential demand is more concentrated, that is, where the population density is higher. Given that the investment involves high fixed costs, unit costs increase as housing density decreases. White areas are subject to market failure so, for this reason, state aids are recognized in order to allow those rural territories to develop themselves.

¹⁹ Retrieved from: [https://eur-lex.europa.eu/legal-content/IT/TXT/PDF/?uri=CELEX:52009XC0930\(02\)&from=NL](https://eur-lex.europa.eu/legal-content/IT/TXT/PDF/?uri=CELEX:52009XC0930(02)&from=NL)

- Grey areas are areas with a single broadband network operator. A monopolistic operator does not exclude a market failure or the existence of cohesion problems, on the contrary, it may affect the quality and/or the price of services offered to citizens. In grey areas it is possible that some categories of users are not adequately served or that the prices charged make the service inaccessible to them. In this case and under certain circumstances, state aid could reduce the problems related to the de facto monopoly of the incumbent.

- Black areas are areas where at least two broadband network service providers operate, therefore the supply takes place under conditions of competition. For this reason, these areas are not considered areas of market failure. It is very unlikely that the public intervention will bring further benefits, which is why the Commission considers negatively the measures to finance the introduction of a new broadband infrastructure in black areas.

The EU Commission requested to the Italian Government to set up a system of detailed mapping of the areas targeted for receiving the public money, to prove any market and/or cohesion failure (Matteucci, 2019). Infratel was in charge of this and it also identified through public consultation the areas previously mentioned.

On the basis of the characteristics of these areas, in Italy, three different intervention models have been defined, in order to implement infrastructure enabling broadband networks to at least 2 Mbps:

- Model A: it consists of direct intervention by the state, which directly realizes the works or purchases rights to use existing infrastructure for a period of about fifteen years, in Iru (Indefeasible right of use) mode. The infrastructures built, which are owned by the State, are made available to operators on market terms, against payment of a fee subject to annual review, determined by Agcom.

- Model B is the provision of a State contribution to an investment project drawn up by a communications operator, selected through a public procurement procedure, the purpose of which is to find a solution to the market failure. The determination of the level of contribution is based on the funding gap rate²⁰ of the project and the beneficiary will be obliged to grant all forms of access to infrastructure, wholesale and retail, to other operators in the sector and will remain the owner for at least seven years.

- Model C is defined as “incentive to demand” and is intended to contribute the costs necessary to the purchase of access terminals for users residing in ultra-marginal areas, not covered by the service.

Model A and Model B are on the supply side, while Model C is on the demand side.

These models of intervention can be summarized in the following table:

²⁰ The funding gap rate is the percentage of initial investment not covered by expected net revenue.

Table 3: Models of intervention in Italian national broadband plan.

MODEL OF INTERVENTION	DESCRIPTION	MARKET SIDE
A	Direct State intervention to construct and manage higher capacity backhaul infrastructures.	Supply side
B	Public subsidy to telecom operators to invest in infrastructures.	Supply side
C	Financial support to users for purchasing access terminals in ultra-marginal rural areas.	Demand side

Source: own elaboration.

This was subject of State Aid SA.3307, which was referred to the Italian National Broadband Plan (2011), subsequently extended with SA.38025. The last SA handled was decisive for the completion of the Italian plan. In fact, in Italy there has been a significant delay in achieving the first DAE target (that had to be accomplished by the end of 2013) for a number of reasons, one of which is linked to the difficulty in raising funds to finance infrastructure works by the government.

All in all, in Italy the territories that at the beginning of 2010 were uncovered did not coincide with the marginal areas, but also included important agro-food and industrial districts, as well as popular touristic locations. This basic fundamental fact was neglected by the Italian broadband policies until 2014-2015, and represents another main limitation of the FGB public plan, in terms of capacity to promote dynamic efficiency (Matteucci, 2019).

Meanwhile, the European Union has launched new measures to develop infrastructure to support the ultra-broadband network (EC, 2013/C 25/01)²¹; this led to a big “step change”, requested by EU law by increasing connection speeds from 30 to 100 Mbps by 2020, due to the fact that Italy, had to plan an upgrading the existing network in grey areas.

The Italian plan for ultra-broadband network was cleared on December 18, 2012 through SA.34199, while the Italian broadband plan was still in place. Taking into account the problems related to the areas, that occurred during the first plan, Italy decided to change the targets: in the former plan, rural and marginal areas were considered first while in the BUL plan, strategic areas for economic development have been brought to the forefront.

²¹ More information:

<https://www.reterurale.it/flex/cm/pages/ServeBLOB.php/L/IT/IDPagina/10570>

Between white areas, where no operator has invested in NGAN²² infrastructure either planned to invest within the next three years, the most economically strategic ones have been selected in order to start with the interventions, on the basis of the following characteristics defined by the MISE: *new generation data center sites, major population density, schools, strategic industrial areas and logistic hubs (airports, ports, interports), universities, research centers, technological hubs, health facilities, courts.*

What is important to underline is the fact that investing firstly in the “Mezzogiorno”, so in the south regions of Italy, was a risk as crucial and export-intensive industrial areas in the north were being left behind.

Anyway, in this case, according to the BUL plan, the infrastructure built must be “future proof” in order to allow users to benefit from the evolution of the digitalization, also prioritizing the reuse of the existing infrastructures.

In this case, the models of public intervention are four and the choice of the model depends on the cluster chosen. Infratel in 2014, made a consultation through which divided the Italian territory into 94.645 sub-areas. The classification in clusters is more accurate than the former version adopted with the Italian Broadband Plan, with White, Grey and Black areas. This classification made possible to optimize the

²² NGAN are new generation access networks.

use of the financial resources and the deadlines established when defining the plan, so by 2020. The following table describes each of the four identified clusters:

Table 4: Description of the clusters for the Italian ultra-broadband plan.

CLUSTER	DESCRIPTION	MUNICIPALITIES	UPGRADE	FINANCING
Cluster A	Cluster with the best cost-benefit ratio, where private operators are most likely to be interested in investing.	15 black cities: Roma, Milano, Napoli, Torino, Palermo, Genova, Bologna, Firenze, Bari, Catania, Venezia, Verona, Messina, Padova, Trieste. 15% of national population.	From 30 to 100 Mbps.	No non-repayable fund, intervention by the market only.
Cluster B	Areas where operators have built or will build networks with connections at least at 30 Mbps, but market conditions are not sufficient to ensure acceptable returns on market-only conditions to invest in 100 Mbps networks. It is divided in: - B1, where operators invest directly;	1.120 municipalities, some in black areas and others in grey areas. 45% of national population.	From 30 to 100 Mbps.	Mnimal use of gran resources.

	- B2, areas with connection at 30 Mbps.			
Cluster C	Marginal areas currently in market failure, including rural areas, where it is estimated that operators may only be interested in investing in networks with more than 100 Mbps with government.	2.650 municipalities and some rural areas not covered by connection at 30 Mbps. 25% of national population.	From 2 to 100 Mbps	Non-repayable public resources, proportionally greater than cluster B.

Cluster D	Typical market failure areas, where only public intervention can guarantee a connectivity service of more than 30 Mbps to the resident population.	4.300 municipalities, especially in the south. 15% of national population.	From 2 to 30 Mbps	The public intervenes directly by financing the infrastructure it owns.
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Source: own elaboration based on the mise document “Strategia Italiana per la banda ultralarga” of 2015.

On the basis of this classification, the requirements and the corresponding financial model applied were defined.

Details of the four intervention models are as follows:

- Model I: Direct intervention: its object is to construct, according to a principle of technological neutrality, the passive parts of the access network which, while remaining publicly owned, are given in concession. The works will be awarded by means of a tender, based on the criteria of the most economically advantageous offer to the party that will have presented the best project, maximizing the use of innovative technologies with low environmental impact, in accordance with the provisions of articles 81 and 83 of Legislative Decree 163/2006. Once the infrastructure, which remains in public ownership, has been completed, a concessionaire is selected through a tender process to offer passive access to end-customers and to transfer the rights of use of the infrastructure built to the operators.

Therefore, the concessionaire will be responsible for maintaining the infrastructure and the operators will ensure the connection to end-customers. The concession must be of limited duration (e.g. 10 years) and the way in which the infrastructure is managed must safeguard both the public interest and the efficiency of the infrastructure. AGCOM will be responsible for regulating the way in which access to the various network segments provided and the relevant price level, prior to the call for tenders. Model I will be adopted indicatively in areas belonging to “cluster D”.

- Model II: Public-Private Partnership (PPP): it's a partnership agreement between a public entity and one or more private entities that co-invest in the construction of access infrastructures, guaranteeing one or more private entities the possibility of taking advantage of the concession of one of the access infrastructures from the outset, based on the requirements defined in the appropriate calls for tender. PPP make it possible to increase the volume of investment through the contribution of private individuals, which must in any case be subject to strict control systems to avoid monopolistic positions that slow down the competitive exploitation of infrastructure by other operators. The public administration identifies by means of a tender one or more entities to co-contract for the realization of the infrastructure. The interested entities will be selected on the basis of a technical-economic solution accompanied by a business plan for the realization of the intervention in question, which they will have to present at the time of the tender. The duration of the

concession of this model is the same as that of the first one and the ownership of the realized infrastructure will be conferred to a separate legal entity, company or consortium.

- Model III: Incentive Model: the model makes it possible to award a public subsidy to an operator by means of a call for tenders, in order to encourage faster network deployment. The involvement of the private sector guarantees greater effectiveness of intervention and the ability to attract investment; this is why this is encouraged by a public contribution offered by the public administration, in order to create NGA links. The beneficiary is selected through a public tender and the ownership remains with the beneficiary operator. It will be up to AGCOM to regulate the bidding conditions before launching the calls for tender. However, this model is only feasible in certain areas with an average density of housing units per square/km, which is mainly found in marginal areas.

- Model IV: Intervention for demand aggregation: this model is characterized by the presence of features relating to each of the above models. In the areas of sub-areas where the model is applied, aggregate demand must be sufficient for it to be economically and financially sustainable. The promoter can be public, private or even a PPP and becomes the owner of the infrastructure in accordance with the constraints of the intervention model used. This model foresees the involvement of the local authorities on whose territory the area or sub-area is included, which will cooperate with Infratel Italia for the implementation of the plan. On the basis of the

prepared business plan, the promoter launches a pre-registration activity in the area or sub-area aimed at companies, public administrations and/or private individuals in the identified territory. If a sufficient number of preliminary applications are received to ensure the economic and financial viability of the initiative, with the technical support of Infratel, it will proceed according to the rules of the chosen model. The presence of a control system managed by the competent administration, will have to verify through the periodic monitoring of the implementation of the measure, the presence of eventual extra-profits, guaranteeing to the administration the reimbursement of the over-compensation, if the market responds more rapidly and massively than what was foreseen. At the end of the four-year period, the private operator will be required to repay the public contribution if the revenue from the activity exceeds the threshold defined in the invitation to tender. The relevant rate of remuneration will be defined on the basis of the WACC²³ established by AGCOM and the excess profit will be recovered in proportion to the intensity of the aid.

All four models optimize the reuse of infrastructure, both publicly owned and privately owned (existing cable ducts and infrastructure of local operators or multi utilities) in line with Directive 2014/61/EU of 15/05/2014, for which the acquisition

²³ WACC is the calculation of the weighted average cost of capital. For more insights and for the computation of the WACC: <https://www.agcom.it/documents/10179/15564025/Allegato+8-8-2019+1565257778860/c95af003-2ac2-48aa-ab9c-1734c32585a7?version=1.0>

of the rights of use is foreseen. This approach is facilitated by the implementation of the Catasto del sotto e sopra suolo, which in this strategy assumes a fundamental value to ensure transparency and good coordination of works.

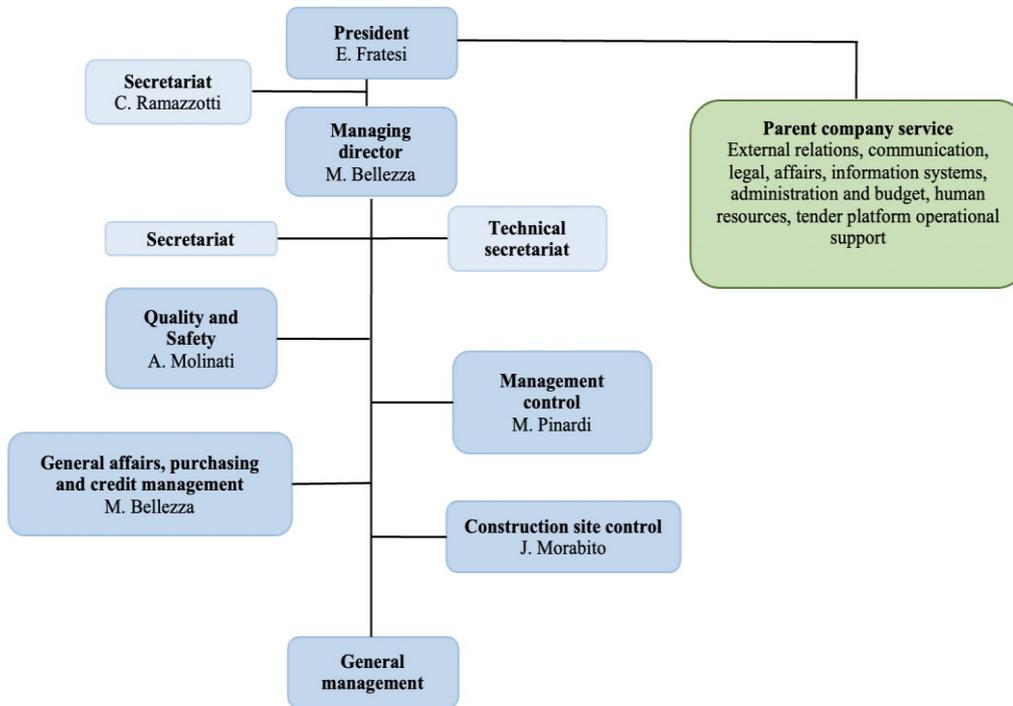
2.2 Infratel's governance

Infratel is a limited company but with a public mission. For this reason, its control is determined by the fact that the State must be able to ensure that the funds allocated to the company are used consistently with the mission in an effective and clear manner.

Infratel's governance has changed from the moment it was founded to the present day; in 2015, through the agreement "Accordo di programma" concluded on October 20, 2015 and implemented in 2016 between the MISE, Invitalia and Infratel, Invitalia's control over Infratel has been increased, giving it 100% control, so by increasing political control over Infratel.

Infratel's governance is currently composed as in the following organization chart.

Organization chart 1: Infratel's organization chart.



Source: own elaboration on the basis of the Infratel's website.

At the top of the organizational chart there is the President, Eleonora Fratesi, who has a degree in Information Sciences from the University of Pisa. She has worked mainly in multinational companies and universities in the field of research, development and digital innovation. She was a member of the board of directors of the Cluster Smart Cities & Communities Regione Lombardia.

In the next level, there is the Managing Director, Marco Bellezza, lawyer, is legal advisor for communications and innovation to the Minister of Economic

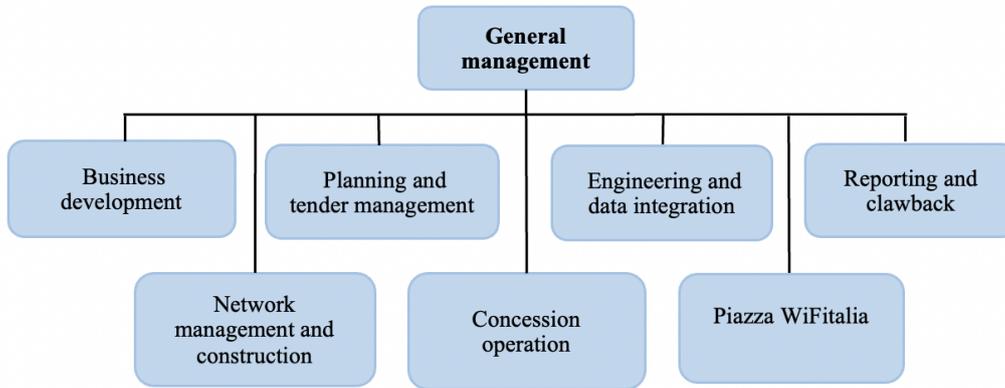
Development. He has been legal advisor to the Deputy Prime Minister Luigi Di Maio.

At the bottom of the organization chart is the general management, which, within the scope and limits of the powers delegated to it, ensures among other things:

- the planning, design and construction of network infrastructures, their maintenance and marketing as well as the reporting and active cycle process in order to achieve the objectives contained in the strategic plans and budgets approved by the board of directors,
- the preparation, according to directives of the managing director, of the operational plans to be submitted to himself,
- coordinating the outsourcing to third parties of services, works and supplies in compliance with current regulations on outsourcing,
- the signing of transfer contracts in IRU mode to operators.

In turn, the general management is divided into the following sections, each with specific tasks.

Organization chart 2: General management controlled areas.



Source: own elaboration on the basis of the Infratel’s website.

Moreover, in order to control and manage the activities carried out by Infratel, the regional administration has designated the MiSe as an intermediate body between the regional administration, the managing authority and Infratel. The MiSe carries out the functions of address and coordination with an autonomous structure and duly separated from that which, in turn, will execute those of control; Infratel will take care of the phase of management and implementation of the plan.

Table 5: Activities of the intermediate body.

INTERMEDIATE BODY	
Guidance and coordination	Conventions and agreements
	Relations with Regions
	Formal documentation
	Audit
Control	Communication
	First-level controls
	Updating of regional information systems for project monitoring
	Reporting

	Storage
Management	Implementation of convention programme
	Preparation and implementation of tender
	Management of relations with the beneficiary
	Support in the preparation of materials, guidelines and manuals

Source: Ministero dello Sviluppo Economico – Banda Larga - Organismo intermedio
<https://www.mise.gov.it/index.php/it/comunicazioni/banda-ultralarga/banda-larga>

2.2.1 Focus on Infratel strategy

Infratel Italia, also known as Infrastrutture e Telecomunicazioni per l'Italia S.p.A. is an Italian public company operating in the telecommunications sector for the Ministry of Economic Development of which it is an in-house company²⁴. Operational since 2005, it is the subject of the Government's broadband and Ultra-broadband plans. Infratel Italia, therefore, builds ultrabroadband telecommunications networks with the collaboration of public and private entities, in order to foster as much as possible the socio-economic development of the areas involved and of the country as a whole, with the ultimate aim of reducing the digital divide between Italian regions, extending opportunities for fast internet access. Moreover, it's entrusted from the MISE, of the plan "Wi-Fi Italia" and manages the

²⁴ In-house companies are public companies incorporated in a corporate form, typically limited companies, whose capital is held in whole or in part, directly or indirectly, by a public body entrusting them with instrumental or production activities. Source: https://it.wikipedia.org/wiki/Azienda_pubblica#Societ.C3.A0_in_house

cadaster of infrastructures SINFI²⁵ (Sistema Informativo Nazionale Federato delle Infrastrutture). The action of Infratel aims at the achievement of the following objectives: lower costs for the regions, optimization of public investment, implementation of an integrated operational model that allows joint public-private actions and integration of the structures already in place with those of new realization and reduction of the digital gap through the support of the infrastructure offer.

The main tasks of Infratel are:

- to map areas of market failure through contacts with telecommunications operators,
- to plan actions avoiding duplication of investment,
- design broadband and ultra-broadband infrastructures and networks using existing and locally available infrastructures and thus optimizing investments,
- to manage contracts for the construction of infrastructure and evaluate investment projects as part of the interventions of the National Broadband Plan and the strategic Ultra-broadband project,

²⁵ SINFI is the tool of the strategy for ultra-broadband, created to facilitate the sharing of existing infrastructure and ensure transparency of authorization procedures, minimizing environmental impact and implementation costs. Through the D. Lgs. 33/2016 called “Attuazione della direttiva 2014/2016/UE del Parlamento Europeo e del Consiglio del 15 maggio 2014”, on measures to reduce costs of installing high-speed electronic communication, the SINFI was established in order to facilitate the sharing of infrastructure and the planning of interventions by mapping existing electronic communications networks and any other physical infrastructure serving them. More insights here: <https://www.infratelitalia.it/piani-nazionali-e-regionali/catasto-delle-infrastrutture-sinfi>

- to manage the works carried out while maintaining their efficiency over time,
- to ensure access to infrastructure for all operators on fair and non-discriminatory conditions.

Infratel is responsible for the good and punctual execution of the work, verification of the materials used, performs the assessments in progress, measurement and accounting of the parts carried out, monitoring the correct progress of the works within the established time and ensuring that the safety rules in the yards are respected for the entire period of execution of the work until it is properly carried out and tested.

As already said, Infratel SpA is a private corporation fully dependent and 100%-owned by the Ministry of Economic Development. It was specially founded in 2003 to act as a specialized company operating in the telecommunication area.

Relations between Mise, Invitalia and Infratel are governed by the programme agreement²⁶ signed on October 23, 2015 pursuant to article 7 of law n. 80/2005, for the organic achievement of the programme's objectives, i.e. the implementation of activities relating to the upgrading of the public infrastructure network for broadband and ultra-broadband in all underutilized areas of the country.

The remuneration of Infratel is governed, as far as interventions financed by the state budget are concerned, by reporting rules which form an integral part of the

²⁶ More legal references and strategic documents: <https://www.infratelitalia.it/societa-trasparente/disposizioni-general/atti-general>

programme agreements. Payments are made on presentation of periodic statements in which the company charges the Mise, in addition to the direct costs of the interventions, the company's operating costs, deducted from those attributable to interventions carried out with EU regional funds.

CHAPTER 3

FINANCIAL AND ECONOMIC ANALYSIS OF INFRATEL

3.1 Analysis of the scenario today in Italy

Infratel operates in a particularly complex and competitive environment, such as the telecommunications sector and more specifically the infrastructures enabling broadband and ultra-broadband services.

First of all, it's fundamental to clarify the difference between the infrastructure and the technology. The infrastructure is the "physical" medium that carries or enables the transport of information; it has a very long expected life that can easily exceed 50 years. The technology is what allows information to be transmitted by means of the infrastructure and takes the form of the active equipment needed to encode the information into signals to be sent via the infrastructure. The latter have a typical expected life of about 5-15 years. Every infrastructure has physical limits that define a sort of ceiling to the link speed allowed by that infrastructure. Given these limits, the performance of a link depends on the effectiveness with which an infrastructure is exploited by a given technology. Technology evolves all the time, the infrastructure remains and does not change when the technology is renewed.

To date, it's undeniable that the pandemic has changed the world we live in and we had to adapt to the new reality; telecom companies have become the basis for many businesses to recover in 2021. The Covid-19 emergency, despite its current

dramatic nature, and the resulting exponential increase in demand for connectivity and associated services, call for extraordinary action in order to overcome traditional resistance by raising awareness at all levels of the essential need for a digital infrastructure that is in step with the times and able to support upcoming technological developments. The resources dedicated to digital infrastructures therefore, represent an extraordinary opportunity to make the country capillary connected quickly and effectively. Moreover, the competitive dynamics in the telecommunications infrastructure sector have changed profoundly in recent years, with the entry of new players into the ultra-broadband market, such as Open Fiber, the Italian wholesale-only infrastructure operator, and TIM's FIBERCOP project, which envisages the unbundling of the copper access network and the development of a new secondary fibre-optic network in over 1,700 Italian municipalities in wholesale-only mode. The development of next-generation broadband services requires greater bandwidth availability, which only fiber-optic networks can guarantee through increasingly high-performance networks capable of delivering services up to 1 Gbit/s (very high capacity networks – VHCN). In terms of NGA networks, only 47% of Italian real estate units have networks that guarantee connectivity higher than 100 Mbit/s, of which 16% reach up to 1 Gbit/s. On March 2021, the European Commission presented a blueprint of the digital transformation of Europe by 2030, which envisages the construction of NGA networks capable of reaching 1 Gbit/s for all households, businesses and public administration offices.

In addition, after the 5G pre-commercial trials in 5 cities, (Bari, L’Aquila, Matera, Milano, Prato) supported by the Ministry of Economic Development, and following the award of 5G frequencies in 2018, operators are starting to deploy new 5G services, which in turn require the development of a modern fiber optic cable infrastructure to connect the new radiating sites²⁷.

The current coverage of the NGA network in Italy is summarized in the table below.

Table 6: current coverage of the NGA network in Italy, an estimate elaborated by Infratel Italia on the basis of AGCOM data on maps.agcom.it as of December 2020.

NGA NETWORK PERCENT OF COVERAGE AS AT 31 DECEMBER 2020				
REGION	NGA at 2020	Of which NGA 30-100	Of which NGA > 100 and < 200 Mbit/s	Of which FTTH/B at least 1 Gbit/s
Abruzzo	61.3	20.7	28.2	12.4
Basilicata	71.7	27.7	35.4	8.6
Calabria	72.2	33.5	32.6	6.1
Campania	74.6	21.5	27.7	25.4
Emilia Romagna	65.8	21.7	29.3	14.8
Friuli Venezia Giulia	72.8	37	24.5	11.3
Lazio	73.2	19.4	35	18.8
Liguria	74.8	24.2	26.7	23.9
Lombardia	78.2	34.1	29	15
Marche	67	29.5	31.7	5.8
Molise	58.2	21.4	31.4	5.5
Piemonte	68.3	29.2	21.5	17.6
Puglia	78.9	22.2	44.6	12
Sardegna	71.5	34.8	27	9.7

²⁷ Data provided by Infratel’s 2020 budget.

Sicilia	84.1	16.4	44.4	23.4
Toscana	78.6	30.5	34.5	13.5
Prov. Bolzano	42.8	20	21.1	1.6
Prov. Trento	66.4	32.9	20	13.5
Umbria	69	21.3	32.1	15.6
Valle d'Aosta	49.6	35.1	10.1	4.5
Veneto	80.3	41.4	25	14
TOTAL	74.3	27.3	31.1	15.9

Source: own elaboration from Infratel 2020 Budget.

3.2 Research methodology

In order to reach the objective defined by the thesis, it's fundamental to define the methodology used. The objective is to conduct a study on the main infrastructure and telecommunication manager, an in-house company of the Ministry of Economic development, Infratel SpA, in such a way as to identify if the strategy already described has been successful in terms of costs, results and time taken, mainly by analyzing its financial statements and its website. All relevant financial and economic implications will be taken into account in order to understand Infratel's strategic choices.

Moreover, the telematic interview with Infratel's managing director, Marco Bellezza, and the head of management control, Massimiliano Pinardi, also enabled a more accurate interpretation of the balance sheet data and in-depth examination of the company itself.

The period taken into consideration is the ten years-period 2011-2020, for which financial statements are available on the Infratel's website and on AIDA²⁸ database: the Infratel website shows us the budgets from 2013 to 2020, while AIDA from 2011 to 2020.

The main fields which will be analyzed financially are:

- profitability,
- financial solidity,
- liquidity.

First of all, the financial statements available on AIDA will be analyzed in order to understand which are the main concerns, on the basis of events and the evolution of the company's assignments, and to assess the economic and financial health of the company. Once the ratios that will be most useful for the research to be carried out in this thesis have been selected, which are also available on AIDA, will then be analyzed in order to gain an even deeper understanding of the company's performance and evolution in terms of finance, liquidity, solidity, profitability and productivity.

²⁸ AIDA (Analisi Informatizzata Delle Aziende) is a database realized and distributed from Bureau Van Dijk, where it's possible to consult data on all Italian companies, such as personal data of the company, balance sheets and financial ratios. It proposes standardized and comparable data for all the companies that it contains, offering the detailed balance sheet, reclassified according to the scheme contained into the IV EEC directive. This is the link to the website: <https://www.bvdinfo.com/it-it/le-nostre-soluzioni/dati/nazionali/aida>

3.2.1 An useful benchmark: Lepida S.p.A.

In order to understand and assess the magnitude of certain indices, it's necessary to compare them to the industry average and/or to a similar company in terms of industry and regulation. In this case, it was decided to use Lepida S.c.p.A as the benchmark. Lepida is an in-house company based in the territory of Emilia-Romagna Region, which like Infratel, operates in the telecommunications sector but at a regional level. Its main activities relate to the implementation, maintenance and management of regional and local networks to reduce digital divide situations, i.e. market failure areas. It's involved in the adoption of new technologies applied to the government of the Region and moreover its activity is focused on the provision of network sections and services at fair and non-discriminatory conditions to local and state public bodies, public companies, law enforcement agencies for the implementation of broadband infrastructures to connect their premises in the territory of the Emilia-Romagna Region. Lepida S.c.p.A is composed of more than 440 organisations and the Emilia-Romagna Region is the majority shareholder. The following analysis will, of course, take into account the differences between the companies, especially in relation to the volume of business and the catchment area.

3.3 Financial statement analysis

As previously mentioned, Infratel is an in-house company of the Ministry of Economic development, operating in the infrastructure and telecommunications

sector (ATECO 2007 Code: 610000 Telecommunications). It operates as an S.p.A. with a single shareholder and had 135 employees as at 31.12.2020.

The company prepares its financial statements in accordance with the provisions of the Italian Civil Code with the integration of the National Accounting Principles established by the National Council of Chartered Accountants and Documents issued by the Italian Accounting Body (OIC). The document implements the “Accounting Reform” in implementation of the European Directive 2013/34 with the publication in the Official Journal of Legislative Decree no. 139/15.

3.3.1 Financial situation

Before starting with the ratios analysis, it is important to analyze the financial situation over the ten years period. First, activities will be analyzed and then liabilities.

As regards intangible fixed assets, we note that these have remained fairly constant over time; they consist mainly of concessions and licenses and other intangible fixed assets. The highest value for concessions and licenses was recorded in 2016 and amounted to 34,3 million Euros. 2016 is the year in which the greatest number of acquisitions of rights to use existing infrastructure (in IRU mode) suitable for laying fiber, instrumental to being integrated into the newly constructed network, was recorded. This makes it possible to optimize the financial resources available for implementation initiatives and to significantly improve the network deployment schedule. For this reason, this value is indicative of good asset management.

The interview with the company provided a better understanding of how IRUs work. They said that Intangible fixed assets include the recognition of the so-called IRU (Indefeasible Right of Use) on telecommunications infrastructures and is based on framework contracts that regulate the timing and manner of the infrastructures and specific orders for each segment. The consideration paid, usually in advance for the entire duration of the right, is recorded under Intangible Assets in the item “Concessions, licenses, rights of use, etc.”, and reduced by an amortization charge calculated on the basis of the lower of the technical-economic life of the infrastructure and the duration of the right of use, usually 15 years for optical fiber. There are no fixed assets of indefinite duration. The rate used for the 15-year IRU depreciation is 6.66% and is unchanged from the previous years. In the costs for services, the item “IRU from third parties” relates to the acquisition of rights of use of piling infrastructures or cable ducts suitable for laying fiber optics, in IRU mode. Revenues from the sale of rights to use infrastructure to operators in the sector are recognized in the income statement on an accrual basis (*pro-rata temporis*).

Tangible fixed assets have been the main component of fixed assets of the balance sheet since 2011, the first year taken under review. This item includes fiber optic infrastructures, which are the main business of the company. Tangible fixed assets increased rather steadily over the period of analysis from 2011 to 2016. Then, from 2017 onwards, they decreased due to acquisitions recorded in the balance sheet net of the depreciation allowances provided for each year. The acquisition relates to the

recognition as an asset of the construction costs of the sections of fiber optic telecommunications network constructed by contractors. The commencement of depreciation is linked to the entry into operation of the asset and its availability for use by telecommunications operators. The completion of the works is documented by certificates of regular execution (Certificati di Regolare Esecuzione, CRE), attesting to the time of acquisition of the plant in the balance sheet under the item “Industrial and commercial equipment”, which is the predominant item of tangible fixed assets. Each year, assets under construction and payments on account are recorded in the balance sheet, comprising internal and external costs incurred for realization of an intangible asset relating to projects that have not yet been completed. This value varies between 1,7 million (2013) and 7.2 million (2015).

Financial fixed assets appear on the balance sheet only as of 2017, recording a fairly constant value to date. These mainly included security deposits relating to deposits required by public bodies to guarantee the successful completion of infrastructure works on the network as well as deposits for utilities. These security deposits, were previously recorded under memorandum accounts, which were then eliminated by Legislative Decree 139/2015. The item financial fixed assets also includes other receivables related to escrow deposits following a single attachment that represents a preventive seizure served in 2015.

Moving to current assets and liabilities, we can see, from the table below, that they increased significantly from 2011 to 2020, but remaining constant between 2016 and 2017.

Table 7: Amount of current assets from 2011 to 2020 in Euro.

ASSETS	2011	2012	2013	2014	2015
C. Current assets	125.069.089	177.172.921	299.070.238	277.582.359	442.797.273
	2016	2017	2018	2019	2020
	631.372.842	630.351.376	787.775.086	1.040.189.898	1.213.744.051

Source: AIDA.

The main items that have increased significantly are Inventories, consisting mainly of work in progress and cash equivalents.

Inventories and work in progress and on order, which are recorded in the balance sheet gross of payments on account relating to invoices issued as work progresses, increased steadily from 2011 to 2020. This increase is due to the increase in works and construction sites that have developed first with broadband and then with ultra-broadband. Work in progress and on order contains the valuation of the construction of sections for which the company has been contracted by the regions through the MiSe. This valuation is made on the basis of the percentage of completion of the work. Immediate liquid assets also increase in proportion to the work done, despite delays. In fact, due to the delays accumulated in 2020 with respect to the

programme, Open Fiber did not make any payment requests to the company, as contractual constraints would have significantly reduced the amount that could be recognized, postponing them to 2021. The concession contract lays down minimum thresholds for requesting payment, failure to meet which leads to a reduction in billable value.

The total amount of credits remained fairly stable over the years under review, peaking in 2019. This increase essentially relates to credit exposure towards MiSe and private telecommunications operators. All claims are against domestic institutions and customers. Receivables from customers include amounts relating to contracts for the construction of infrastructure on behalf of regional administrations and the assignment to telecommunications operators of rights of use for the fiber optic infrastructure built.

Accrued income and prepaid expenses were insignificant from 2011 (when the item was zero) to 2014. Since 2015, there has been an exorbitant increase in the same item to more than 5 million. This disproportionate increase is due to a more correct reclassification of costs incurred that at the balance sheet date had not been accounted for in accordance with article 8 of the program agreement of 20 October 2015 between MiSe, Invitalia and Infratel. Prepayments are composed of costs incurred in previous years and in the current year, but which are matched by revenues in future years. In 2020, the item duplicates that of 2015, as accrued

interest income accrued on cash investments maturing in 2021, is also included in the item.

Moving on to liabilities, specifically to equity, we see that the share capital has remained unchanged from 2011 to 2020. It is equal to Euros 1.000.000, fully subscribed and paid up, and consists of 1.000.000 ordinary shares with a nominal value of Euro 1 each, fully owned by the Agenzia Nazionale per l'Attrazione degli Investimenti e lo Sviluppo d'Impresa S.p.A., also known as Invitalia, the holding of Infratel. The amount of the legal reserve of Euro 200.000, having reached one fifth of the capital, has not been increased since 2014. The other reserves, at 2020, consist exclusively of the payment on account of a future capital increase, carried out by the parent company in 2004, of Euro 500.000 and have remained unchanged since 2014. There is no share of reserves available, other than that formed by retained earnings, as the company's shareholders' equity includes only the legal reserve. In 2013, the item "Other reserves" amounted to 4.128 million and consisted of a reserve tied to the broadband programme of approximately 3.628 million and the payment of Euro 500.000 made by Invitalia. In 2014, the company's shareholders' meeting approved the release of reserves relating to the broadband program and their subsequent distribution, thereby authorizing the distribution of available reserves.

With regard to profits, we can see, from the table below, that for most years, the profit was carried forward, i.e. they have not been distributed to shareholders or

placed in an optional, earmarked reserve. In the following year they will form part of shareholders' capital. The profits of 2014 and 2015, on the other hand, were distributed to shareholders. 2020, closes with a positive net result, which it proposed to allocate. The financial statement show that part of the profits for the year must be allocated to a reserve called the "Broadband reserve", as provided from the program agreement signed on 28 September 2020, by Infratel, Invitalia and the Mise, which provides separate accounting for the consideration deriving from the transfer of rights to use of infrastructures financed by Mise and those relating to the collection of concession fees, which are treated as contributions and the related costs. From the interview it was possible to deepen the meaning of this reserve. The results of the separate accounts, again as a result of the provisions of the Program Agreement, will be used to replenish a specific restricted equity reserve called, as already said, "Broadband Reserve". With regard to 2020, the first year of application of this provision, the allocation of profits to the abovementioned reserve will be submitted to the shareholders' meeting for approval as soon as the activities aimed at determining the results of the separate accounting system are completed and once they have been audited by the independent auditor, who is required to issue a specific certificate. The results of the separate accounts will be fed, through the allocation of the result for the year by the Shareholders' Meeting, into the specific restricted equity reserve. Should such results be negative in certain years, the corresponding amount of such reserve shall be reclassified among Infratel's

available reserves, subject to authorization by the Ministry, and may be used by the company within the limits of the authorization granted. In the case of a negative reserve, nothing shall be due from the Ministry if it is possible to offset it against positive reserves for future years. Infratel undertakes to submit to the Steering Committee the multi-year investment plans to be financed by the Broadband Reserve, declined in terms of new actions or investments necessary to achieve the objectives of the Gigabit Society.

Table 8: Amount of profit and loss from 2011 to 2020 in Euro.

EQUITY	2011	2012	2013	2014	2015
A.VIII. Profit/loss brought forward	578.680	1.809.370	353.810	0	0
A.IX. Profit/loss for the year	1.295.464	2.287.133	1.393.923	1.127.326	998.132
	2016	2017	2018	2019	2020
A.VIII. Profit/loss brought forward	0	941.791	2.002.233	4.988.309	7.607.445
A.IX. Profit/loss for the year	941.791	1.060.442	2.986.076	2.619.136	2.371.636

Source: AIDA.

Total risk provisions increased from 2011 to 2014 and then from 2016 to 2020, essentially in conjunction with the start of implementation of the two broadband plans. The total for risk provisions consists of only one item: the item “other provisions”. The provision recorded is essentially intended to cover the probable risks of non-recognition of costs incurred for regional job orders, the risk related to

the debt for charges on works due to various territorial entities and the risk arising from legal disputes, both related to contracted works and judicial cases. As already said, the provision recorded increased from 2011 to 2014, because of the litigation that occurred every year. This increase in disputes and therefore in the provision for risks is due to the fact that the company, implementing the broadband program mainly through the construction of fiber optic infrastructures, which requires excavations to be carried out on urban and suburban roads, is exposed to the risk of citations for damages caused by events that may occur during the life cycle of the work sites, i.e., for restoration of the ground that may not be carried out in a workmanlike manner. The decrease in the provision recorded in 2015, which remained unchanged in 2016, relates to the recovery of value for the closure of a dispute following the annulment by the Council of State of the ruling issued by the Lazio Regional Administrative Court, net of a higher estimated value on the risk of the recognition of regional orders. In 2017, there was an increase due to an accrual for the year of a variable production bonus provided for in the agreement between Invitalia and the trade unions in July of the same year, recorded under “future expenses”. From 2018 onwards, these funds continue to increase for the same causes as for the period from 2011 to 2014.

With regard to the employee severance indemnity (TFR), it can be seen that this increases over the years. This increase is mainly due to the fact that the number of

staff has increased. Thanks to the following table, it can be seen that the workforce has grown significantly from 2011 to 2020.

Table 9: Performance of personnel employed in the company.

Staff	*2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Directors	3	3	3	3	2	3	2	2	2	2
Managers	16	16	17	21	17	21	20	18	18	18
Employees	20	21	34	56	52	56	91	104	111	120
Total	39	40	54	80	71	80	113	124	131	140

Legend: * = our estimates.

Source: own elaboration based on the notes from 2013 to 2020 available on the Infratel's website.

Unfortunately, the Infratel website does not contain the 2011 notes to the accounts, which is why the table only shows the total from AIDA and not the details. This increase is in line with the implementation of the plans and the increasing work resulting from them, and is consistent with the objectives set. In fact, the process of reinforcing human resources, is necessary to manage the evolution of production resulting from the increase in activities following the awarding of the BUL I, BUL II and BUL III tenders and from the recent contracts received from Mise for the "Piano Voucher" and the "Piano Scuole". These entries are aimed at creating the best conditions in terms of organizational set-up, dedicated structures and internal competencies. However, these figures do not take into account all the seconded staff working on behalf of Infratel and all the staff employed for external consultancies. Turning to debts, if you look at the balance sheets for the last 10 years, you can see that these have also increased significantly.

As regards amounts due to banks within the financial year, there is a peak in 2015 and 2017. In 2015, Invitalia granted Infratel the use of an overdraft facility, amounting to Euro 20 million, that BNL had granted to the parent company. This borrowing was deemed essential to meet supplier payments falling within the scope of reporting on all activities financed by European Community resources for the broadband and ultra-broadband projects entrusted by the Ministry under the 2007-2013 program. By 2016, the company should have repaid the full amount of the loan as a result of the receipts received in respect of the reports submitted, for which the loan was activated, but this was only partially done. In early 2017, Infratel's share of ordinary short-term credit was reduced to a maximum of Euro 7 million, and the full use of the credit facility granted was requested at the end of 2017. In February 2018, the company repaid an amount of Euro 3,5 million. At the closing date of the 2019 budget, the loan has been substantially repaid and remains unchanged in 2020.

As regard advance payments within, these have shown an increasing value from 2011 to 2019; only in 2020 are advance payments split between within and beyond. Despite this, the sum of the latter two values still shows an increasing value compared to that recorded in 2019, thus the trend described above is confirmed. This item consists of advances and prepayments. The item "prepayments" includes the amount advanced by the client prior to the commencement of work on the

infrastructure. Appendix A shows the breakdown of advance payments by region as at 31.12.2020.

The item “Payments on account”, on the other hand, represents invoices issued to clients of infrastructures for the progress of works that are reflected in specific accounting reports in accordance with the procedures set out in the agreements signed.

Now, looking at trade payables, they show a non-constant but nevertheless increasing trend from 2011 to 2020. This item includes payables for invoices received and invoices to be received, relating to activities carried out by Open Fiber, for which invoice approvals have not yet been issued by Infratel.

The item “Payables to parent companies within” shows payables to the parent Invitalia S.p.A. and essentially includes payables for:

- dividends declared,
- adhesion to the tax consolidation for the portion of IRES taxes,
- corporate services,
- seconded personnel,
- charges of network inventory activities,
- supervisory body and
- board of directors for members employed by the parent company.

These have been growing steadily over time, probably due to the higher turnover recorded and the services provided by the parent company to Infratel.

With regard to tax liabilities, these essentially comprise payables for withholding taxes from employees and self-employed persons. These increased from 2011 to 2015 and then decreased again from 2017 onwards.

Other payables consist mainly of “third-party funds under management” and “other payables”. Other payables essentially comprise contractual penalties charged to contractors for delays in the execution of works, to be recognized to the regions when the various contracts are reported. The item “Third-party funds under management”, on the other hand, includes payable for COSAP/TOSAP, which refer to estimated provisions for charges that will be incurred with respect to local entities for the payment of taxes, and payables for model B and C contributions, which refer to sums disbursed by the MiSe and intended for the disbursement of contributions to telecommunications operators for the construction of the infrastructures of the two models indicated above. These have also followed an upward trend over the years, depending on the volume of business. Accruals and deferrals consist almost exclusively of deferrals, which correspond to adjustments of capital grants on an accrual basis. The item also includes deferred income recorded as an adjustment to revenues from the sale of rights of use of infrastructure built in IRU mode. Accruals and deferrals have had a rather fluctuating trend: they increased steadily from 2011 to 2013 and then remained almost unchanged between 2014 and 2015; between 2016 and 2017 they increased and then decreased until the date of the last published financial statements, i.e. 2020. This trend results from the fact that deferred income

is related to the useful life of assets, the date of delivery of the infrastructure and the duration of the contracts for the assignment of rights of use.

With regard to the memorandum accounts, these from 2011 to 2015 mainly included guarantees issued to local authorities to ensure the proper execution of infrastructure works for the fiber optic network in their territories. In addition, the following items form part of the memorandum accounts:

- sureties issued by contractors as a guarantee for the proper fulfilment of the obligations provided for in the framework agreements signed following the awarding of contracts;
- commitments arising from contracts entered into but not yet implemented;
- guarantees received from the parent company.

With the changes introduced by the legislative decree 139/2015, entered into force on 1st January 2016, relating to the reform of the budget, the accounting section reserved for memorandum accounts has been deleted.

Infratel's financial management was characterized, by extremely prudent cash deployment policies, depending on collection flows from the Ministry of economic development. As regards the monitoring and reporting reports relating to the L. 80/2005 Italian Broadband Program, the following is a summary of receipts received by the Ministry as at 31st December 2020, both by way of advances and by way of recognition contributions.

Table 10: Advances and receipts received by Infratel from the Ministry of Economic Development as at 31 December 2020.

ADVANCE PAYMENTS	AMOUNT	DATE
2004	783.000	09/12/2004
2005	1.500.000	04/04/2005
2006	619.582	28/04/2006
	2.512.418	26/06/2007
2007	3.934.321	26/06/2007
2008	3.776.094	10/04/2008
2009	28.987.769	07/08/2009
	1.097.023	01/10/2009
2013 new tranche	12.450.000	01/10/2013

REPORT	AMOUNT	DATE
I Report	383.346	27/10/2005
	364.361	12/01/2006
II Report	877.908	07/04/2006
III Report	3.544.753	07/04/2006
IV Report	5.687.907	31/10/2007
V Report	10.544.584	31/10/2007
VI Report	3.549.578	14/11/2007
	6.733.074	22/01/2008
VII Report	14.065.728	15/02/2008
VIII Report	7.228.248	23/12/2008
	3.370.818	23/12/2008
	8.643.551	26/03/2009
	140.794	07/08/2009
IX Report	14.005.954	16/10/2009
X Report	16.213.646	21/10/2009
XI Report	5.084.762	19/11/2009
XII Report	5.210.544	21/12/2009
XIII Report	9.383.500	27/05/2010
	218.504	30/11/2010
XIV Report	4.147.790	07/12/2010
XV Report	8.384.377	13/12/2010
XVI Report	15.455.005	22/12/2010

XVII Report	7.561.190	15/07/2011
XVIII Report	12.533.261	06/09/2011
XIX Report	13.162.423	21/12/2011
XX Report	6.283.211	12/12/2011
XXI Report	4.137.304	12/12/2011
XXII Report	13.664.019	12/12/12 - 06/11/13
XXIII Report	8.449.950	06/11/2013
XXIV Report	4.957.993	06/11/2013
XXV Report	4.445.735	23/12/2013 - 06/11/2014
XXVI Report	7.497.759	06/11/2014
XXVII Report	4.728.302	06/11/2014
XXVIII Report	6.385.959	16/12/2014 - 06/08/2015
XXIX Report	4.593.051	06/08/2015
XXX Report	4.404.496	23/11/2015
XXXI Report	6.916.243	23/12/15 - 28/12/2015
XXXII Report	13.481.412	16/12/2016
XXXIII e XXXIV Report	16.484.554	16/12/2016 - 18/7/2017
XXXV Report	6.654.698	18/07/2017
XXXVI Report	6.601.836	21/12/2017
	0	22/10/2018
XXXVII Report	4.879.225	20/04/2018
	34.329	22/10/2018
XXXVIII Report	1.489.865	22/10/2018
	320.060	10/12/2018
XXXIX Report	3.793.857	10/12/2018
XL Report	3.832.201	17/12/2018
XLI Report	444.013	11/09/2019
XLII Report	3.457.792	11/12/2019
XLIII Report	115.001	14/12/2020

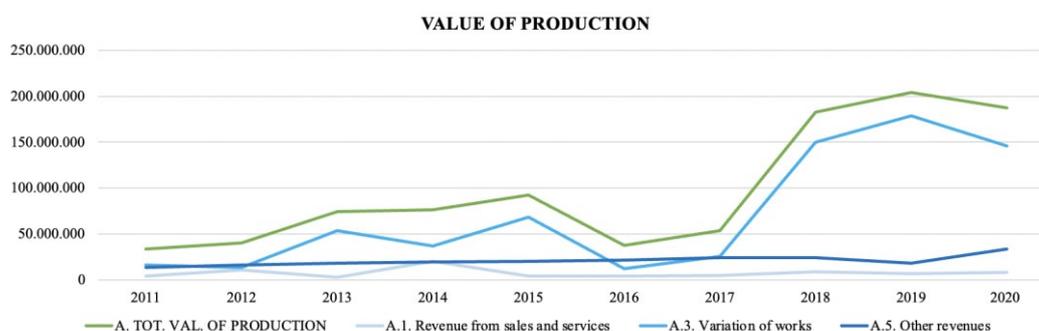
Source: Infratel's 2020 budget.

3.3.2 Economic situation

This section will analyse the economic performance of the Infratel company from an economic point of view.

Starting with the value of production, we can see from the graph below how these have changed significantly over the decade.

Graph 1: development of the value of production from 2011 to 2020.



Source: own elaboration based on the Infratel's balance sheet.

It can be seen from the graph that the main item influencing the value of production over time was the change in works: this item in fact defines the trend of the macro-item.

Revenues from sales and services include maintenance service fees, invoiced in the year, to telecommunication operators, revenues accrued in the year related to the transfer of rights of use of owned infrastructures (IRU) and revenues from infrastructure activation. These are entirely attributable to Italian counterparties and, in particular, revenues from maintenance services deriving from services

charged with fixed fees are recognized in relation to the time period covered by the fee commensuration.

The table below shows the values of the IRU recognized in the income statement in the various years on a *pro-rata temporis* basis, so in proportion to time.

Table 11: IRU values booked in the relevant years.

YEAR	REVENUES IRU ASSETS MISE 2020
2006	1.845
2007	230.940
2008	556.935
2009	854.207
2010	972.498
2011	1.233.956
2012	1.598.736
2013	1.693.000
2014	1.900.324
2015	2.276.845
2016	2.413.673
2017	2.741.359
2018	2.889.768
2019	3.074.553
2020	3.230.545
Total	25.669.184

Source: own elaboration based on the Infratel's balance sheet.

Revenues from sales and services showed an inconsistent trend over the decade, with peaks in 2012, 2014 and 2018; these, as already mentioned, depended on the progress and completion of the works.

The change in contract work in progress is determined, with respect to contracts that the company is executing on behalf of regional governments, on the basis of work performed within the financial year, applying the “percentage of completion” method, whereby a portion of the fees is recognized in the financial year in proportion of the progress of the work. As already mentioned and as can be easily seen from the graph above, the peaks occur in 2013 and 2015 and then increase significantly from 2018 to 2020 and define the trend of the “value of production item”. These increases compared to previous years are mainly due to the closure of activities for certain orders. For example, the peak recorded in 2015, relates to the closure of contracts for work in Campania, Molise, Piemonte, Sicilia, Toscana and Veneto while the increase for 2019 is mainly due to the valorization of the activities carried out during the year of the BUL project. There is a decrease in 2020 compared to 2019 mainly due to the combined effect of the following factors:

- decrease in the activities of the direct regional model,
- decrease in regional and concession model activities.

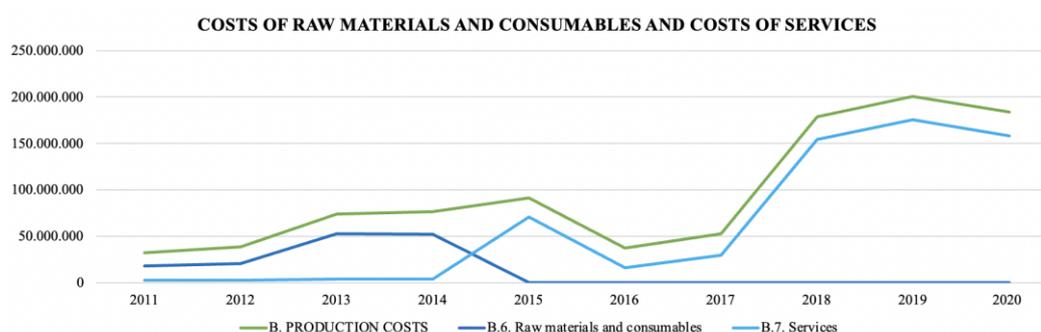
These decreases are mainly due to the Covid situation.

The item “other revenues” mainly comprises revenues for recoveries of countries incurred on behalf of third parties and has a fairly constant trend over time.

Operating grants are the recognition of the company’s operating costs such as personnel, management costs, less revenues from the sale of IRUs, pertaining to each financial year, as approved by the MiSe.

As regards “production costs”, these followed the same trend as production value. The evolution of costs for services and costs for raw materials and consumables over the ten-year period, deserves particular attention. A graph describing the trend of the two items is shown below.

Graph 2: Costs for services and costs for raw materials and consumables over the ten-year period compared to total production costs.



Source: own elaboration based on the Infratel’s balance sheet.

From 2011 to 2014, raw materials and consumables accounted for the majority of production costs. In 2015, the item “raw materials” decreased dramatically; these costs were mainly represented by costs for essential consumables such as stationery. In the same year, costs for services, which doubled compared to the previous year, mainly included “materials for third parties”. The latter item, refers to costs incurred for the acquisition and construction of telecommunications infrastructure or rights of use for infrastructure or cable ducts suitable for laying fiber optics, in IRU mode, as well as costs related to the construction of infrastructure in the context of construction contracts, valued at the cost of acquisition and construction resulting

from the supply invoices. Until the previous year, these costs were classified under the item “for raw materials and consumables”; in order to achieve a more correct representation, they were allocated to services. Other costs contained in the cost of services of a very significant amount relate to consultancy; these are legal and notarial consultancy, technical consultancy, administrative consultancy and consultancy relating to occupational health and safety obligations. The other part of costs for services refers to charges to the parent company, which concern the service contract related to the administrative management of personnel, IT services and legal and corporate support, as well as the cost of the supervisory body (Organismo di Vigilanza).

However, since 2015, there has been a clear reversal of this trend. Since 2015, in fact, the main cost item determining the trend in total production costs has been service costs. From 2018 to 2020, these costs increase significantly; this increase is due to the start of work on the ultra-broadband plan. The slight decrease for the year 2020 is probably due to the situation generated by the Covid pandemic. In 2020, costs for materials on behalf of third parties decrease, but costs for “collaborators and other personnel-related costs” increase, due to an increase in the average number of collaboration contracts.

Costs for use of third party assets vary over time according to the contracts and needs of the company. In 2020, for example, these were car and machinery rentals and software licence fees. There are peaks in leases and rentals in 2011, 2014 and

2017, i.e. in the years in which the volume of broadband and ultra-broadband infrastructure built has increased, probably due to the fact that the company needed resources that it did not have on its own property. In 2014, this item consisted more of “ANAS rights and other through fees” and other crossing fees, which include provisions for amounts due to ANAS S.p.A.²⁹ for periodic through fees; this peak is due to the increase in the volume of infrastructure built.

Personnel costs also represent a substantial part of the costs of production and have increased over time; this increase was mainly due to the increase in resources employed, as shown above in table 9.

Depreciation and amortization increase as fixed assets increase.

Amortization of intangible assets mainly refers to the amortization of rights to use of the third-party infrastructure, in IRU mode. Depreciation of tangible assets relates to fiber optic infrastructures that have entered into operation and are depreciated over a period of 20 years, in line with their estimated useful life.

In 2014, there was a significant impairment of the other fixed assets relating to provisions for doubtful debts. In addition, the company, following an analysis, adjusted the value of fixed assets, making an impairment to reflect the loss of

²⁹ ANAS S.p.A. (an acronym for “Azienda Nazionale Autonoma delle Strade”) is an Italian joint-stock company operating in the road infrastructure sector. Legally, the company qualifies as a body governed by public law; moreover, within the European system of national and regional accounts, it is among the institutional units belonging to the sector of public administrations, in particular, it is among the companies in the consolidated profit and loss account of the Italian State.

economic functionality of certain assets for which a future usefulness and/or recoverability was not recognized (approximately 570,000 Euro).

Provisions for risks were not recorded during the whole of the decade analyzed, but were concentrated only in certain years. For example, in 2013, a provision of € 450,000 was recorded for charges to be incurred for pending lawsuits for which the risk of losing the case and consequent damages was considered probable. ~~iii-~~

Miscellaneous operating expenses increased from 2013 to 2016. These mainly relate to charges incurred by the company for Tosap and Cosap, indirect taxes, membership fees and other sundry charges. In addition, sundry operating expenses include general authorizations for TLC activities, which corresponds to the annual fee that the company pays to the Ministry of Economic development for the general authorization to install and provide a public electronic communications network.

The item financial income and expenses consists solely of miscellaneous financial income, which includes interest income earned on money deposited with banks. Interest and other financial expenses relate almost exclusively to financial expenses charged to the parent company. In the years 2012 to 2016, there was an increase in the item mainly due to interest expense accrued on loans granted to meet the needs arising from the need to account for all the activities financed by EU resources for the broadband and ultra-broadband projects entrusted to the Ministry.

All years under consideration end with a positive result and are for their totality, of pertinence to the group.

3.3.3 Ratio analysis

Ratio analysis is an investigative technique aimed at reworking the information contained in financial statements in order to understand the evolution, health and future scenarios of a company. This analysis will be based on the indices calculated by AIDA on the basis of the balance sheet values and their reclassification. Thanks to the fact that AIDA provides a ten-year index calculation, it's interesting to see how these have developed over time according to the evolution of society and policies related to the development of broadband and ultra-broadband plan.

First of all, an analysis of the company's main financial indicators will be done. The following tables will show the main indicators that have been selected on the basis of their importance, in order to conduct an accurate financial analysis of the company.

First, an analysis of the company's liquidity will be carried out; the indices chosen and their values are shown in the following table.

Table 12: Financial indicators: liquidity analysis of Infratel

FINANCIAL INDICATORS					
LIQUIDITY ANALYSIS					
	2011	2012	2013	2014	2015
Liquidity ratio or Quick ratio	0,76	0,75	0,67	0,49	0,51
Treasury margin	-45.419.653	-57.139.480	-98.579.724	-	-
Current ratio	1,22	1,14	1,09	1,07	1,02
Net working capital	22.855.462	21.758.750	25.034.693	18.013.240	7.749.698

	2016	2017	2018	2019	2020
Liquidity ratio or Quick ratio	0,85	0,80	0,61	0,45	0,76
Treasury margin	-97.952.726	-115.888.549	- 256.416.753	- 566.137.878	- 151.016.407
Current ratio	1,34	1,36	1,26	1,02	1,92
Net working capital	159.673.103	165.982.593	164.727.527	22.524.523	581.896.896

Source: own elaboration

The liquidity analysis is aimed at highlighting the company's ability to meet short-term commitments through the use of working capital such as cash, receivables and inventories. The four indices contained in table 12, will be analyzed in pairs of two. The treasury margin is a measure of the company's ability to meet its short-term commitments with available resources, i.e. resources that can be liquidated within a time horizon compatible with the maturity of short-term liabilities. Available resources are defined as immediate liquidity (cash on hand and on current account) and deferred liquidity (inventories, receivables, short-term financial investments). The treasury margin, is constructed by comparing the amount of current assets with current liabilities net of inventories:

$$\textit{Treasury Margin} = \textit{Current assets} - \textit{Inventories} - \textit{Current liabilities}$$

The treasury margin is considered positive when it is greater than zero, i.e. where there are sufficient current assets that can be used to meet short-term liabilities without affecting the production process. In the case of Infratel, this is not greater

than zero throughout the period under review, so the company is unable to meet its commitment if it is required to repay the amounts owed to suppliers and lenders. The relationship between the quantities in question can also be represented in the form of a ratio, which is called the liquidity ratio.

$$\text{Liquidity ratio} = (\text{Current assets} - \text{Inventories}) / \text{Current liabilities}$$

The liquidity ratio (or quick ratio), shows how often liquid current assets are higher or lower than the corresponding current liabilities. To confirm the treasury margin result, in the case of Infratel, the ratio is to be considered negative as it is always lower than 1. Only in 2016 it reaches a peak of 0.85 as the highest value of cash and cash equivalents is recorded for the period under review. The spike was due to the fact that, as work on the broadband infrastructure was completed, Infratel was earning money from its deployment. In the last three years, the high liquidity value is due to the fact that, despite the delays, Openfiber did not request payments due to the insufficient state of works and in 2020 due to the Covid situation.

Turning to the net working capital and the current ratio, the net working capital is a margin with similar characteristics to the treasury margin; like the previous one, it is aimed at ascertaining whether a company is able to meet its short-term commitments with current assets, considering current assets as well as inventories.

$$\text{Net Working Capital} = \text{Current assets} - \text{Current liabilities}$$

Even if the values are fluctuating, being the net working capital positive, in the decade under consideration, it means that the current liabilities are covered by the

current assets and therefore that the financial resources of the company cover the investments. This indicates that the company is in financial balance. This is probably due to the fact that the company's debts and losses can essentially be covered by the Ministry.

$$\text{Current Ratio} = \text{Current assets} / \text{Current liabilities}$$

This ratio is always positive in the period considered, but often borderline.

Values greater than zero indicate the ability to create liquidity and thus to meet obligations. Fortunately, this index is positive throughout the decade analysed, with a maximum value in 2020. A positive net working capital is important to be compared to the treasury margin because it demonstrates that through the potential sale of inventories, Infratel's creditors can be satisfied in the short term.

Related to net working capital is the current ratio, which originates from the ratio of current assets to current liabilities.

From these indices it can be deducted that liquidity is insufficient and its management has been extremely prudent.

Subsequently, this table summarizes the indices relating to the analysis of the company's solidity.

Table 13: Solidity analysis of Infratel.

SOLIDITY ANALYSIS					
	2011	2012	2013	2014	2015
Structural margin	-	-	-	-	-
	160.891.615	178.496.292	179.434.114	186.474.205	204.743.180

Fixed asset coverage ratio (financial)	0,02	0,03	0,04	0,01	0,01
	2016	2017	2018	2019	2020
Structural margin	- 209.190.900	- 200.051.944	- 187.368.619	- 170.899.661	- 154.937.903
Fixed asset coverage ratio (financial)	0,01	0,02	0,03	0,05	3,45

Source: own elaboration on the basis of AIDA indicators.

The purpose of the solidity analysis is to investigate the conditions of balance at the various levels of management. Solidity means the ability of a company to present a balanced structure in relation to the characteristics of the sector and in relation, for example, to the composition of sources and the relationship between sources and profitability.

The structural margin shows the difference between equity, i.e. capital contributed by shareholders, and fixed assets.

$$\text{Structure Margin} = \text{Equity capital} - \text{Fixed assets}$$

Its significance underlines the company's ability to cover fixed investments with its own means. In the case of Infratel, the margin is negative throughout the period analysed, so equity does not exceed the level of fixed assets; for this reason, Infratel is not able to fully finance long-term investments without recourse to any form of debt.

The fixed asset coverage ratio relates internal sources of finance to fixed assets.

$$\text{Fixed asset coverage ratio} = (\text{shareholder's equity} + \text{overdrafts}) / \text{total fixed assets}$$

The index measures the level of solidity based on the extent to which technical and financial assets are covered by equity. In an optimal situation, in fact, fixed assets should be financed by own means and medium-long term debts, with a preference for the first source of financing. This condition is important for the financial equilibrium of a company, since fixed assets represent investments characterized by a medium to long payback cycle. In order to interpret the index, it's fundamental to consider the characteristics of the sector in which the company operates. In the case of Infratel, in fact, operating in the telecommunications infrastructure sector, it should be considered that, although the payback is long-term, the construction of the infrastructure itself takes a long time. Moreover, as Infratel in a parastatal company, it is obvious that the resources used will not be essentially its own, but will derive from external sources, such as funds and financing from the parent company, Invitalia.

Generally, this index should be positive. In the case of Infratel, this reflects a lack of solidity, as it is always very close to zero. Only in the last year of analysis is there a substantial increase in value, which is probably due to a more correct allocation of resources.

Other important financial indicators are outlined below.

Table 14: Infratel's other financial indicators.

OTHER FINANCIAL INDICATORS					
	2011	2012	2013	2014	2015
Debt ratio (leverage ratio)	83,00	62,61	67,77	165,25	243,04
Financial independence index	1,20	1,60	1,48	0,61	0,41
Net financial position	-32.239.211	-63.813.150	- 138.249.188	-74.132.855	- 113.770.621
Debt/Equity ratio	0,00	0,00	0,00	0,00	7,42
Debt/EBITDA ratio	0,00	0,00	0,00	0,00	1,39
	2016	2017	2018	2019	2020
Debt ratio (leverage ratio)	321,86	226,85	147,97	131,56	119,05
Financial independence index	0,31	0,44	0,68	0,76	0,84
Net financial position	-332.339.430	-291.394.048	- 283.799.186	- 323.387.977	- 404.846.021
Debt/Equity ratio	0,11	1,89	0,00	0,00	0,00
Debt/EBITDA ratio	0,02	0,41	0,00	0,00	0,00

Source: own elaboration on the basis of AIDA indicators.

A company's level of indebtedness depends on the balance between debt and equity. In the case of Infratel, the debt ratio, is a financial ratio that measures the extent of a company's leverage.

$$\text{Debt ratio} = \text{Total assets} / \text{Net equity}$$

Fixed assets should tend to be financed by equity or, alternatively, by long-term loans. If this ratio is high, it will mean that the company's risk is high, as in the case of Infratel.

Moving to the financial independence index, it tells us in what proportion venture capital or equity of the liabilities has contributed to financing the investments and/or in what proportion the company is dependent or independent on third-party capital.

$$\text{Financial independence index} = (\text{Equity} / \text{Total assets}) * 100$$

In the case of Infratel, total assets is always greater than shareholders' equity, so it means that is always dependent on third parties. Again, the third party in question is the parent company, Invitalia, and the system of public funds allocated to the plans.

The net financial position is a strategic measure representing the company's liquidity and financial debt; it provides the level of coverage of financial authorities by the company's financial receivables and liquidity.

$$\text{Net financial position} = \text{total financial payables} - \text{cash and cash equivalents}$$

It thus expresses the amount of financial liabilities net of assets that could be liquidated and used for repayment, providing a clear measure of the amount of debt for which there is no immediate cover. In the case of Infratel, we find a PFN that is always negative in the decade of reference and is also growing negatively, so it's

easy to see that there is an insufficient amount of cash and cash equivalents to cover the financial debt.

The debt-equity ratio is a measure of the relative contribution of the creditors and shareholders or owners in the capital employed in business. It is used to evaluate a company's financial leverage and is calculated by dividing a company's total liabilities by its shareholder equity. In order to understand better the results of this index, it's important to compare them with the ratio to other similar companies.

$$\text{Debt-equity ratio} = \text{total long term debt} / \text{net equity}$$

In the case of Infratel, we only have results for the years 2015, 2016 and 2017 and these are very different from each other. It results that in 2015 and in 2017, the index being greater than 1, the total amount of the firm's debts exceeds in the value the total amount of equity or capital: this was due to the fact that Infratel absorbed an overdraft given by Invitalia of about 20 million Euros for the payment of suppliers. At the same time, in 2016, approaching zero, it appears that the value of debts is lower than that of capital, as Infratel had almost fully repaid the overdraft facility. This result shows that the higher the above ratio, the smaller the margins for the bank to lend further money to the requesting company, because the debt is already high, i.e. the financial strategy pursued was aggressive. Comparing it with Lepida, during the same time of analysis (from 2015 to 2017), it seems that Infratel and Lepida were similar in 2016 only. In fact, this index for Lepida is always approaching zero. In this case, Lepida is more consistent and constant over time

than Infratel, her-leverage ratios tend to indicate a company with lower risk to shareholders.

The debt/EBITDA ratio is calculated by dividing the debts by the Earnings before Interest, Taxes, Depreciation and Amortization. This ratio measures a company's ability to pay off its incurred debt, through the amount of income available. Even in this case, only results from 2015, 2016 and 2017 are available, so our research will be limited to that years. In 2015, this ratio was high so the company had too much debt than it can handle for the same reason as before. Then, it seems that it declines over time; this indicates that a company is paying down debt or increasing its earnings. Also in this case, the ones of Lepida are more constant over time compared to the values of Infratel. Anyway, a low net debt to EBITDA ratio is generally preferred by analysts, as it indicates that a company is not excessively indebted and should be able to repay its debt obligations. In the case of the two companies, however, the values are rather low, which in conclusion, is positive.

Now, moving on to the economic analysis of the company, the main profitability indicators can be identified in the following table.

Table 15: Main Infratel's profitability ratios.

INCOME INDICES					
	2011	2012	2013	2014	2015
EBITDA	9.580.534	12.197.833	11.960.076	13.503.397	14.372.267
EBITDA/Sales	55,15	45,33	57,43	34,26	59,47
Return on assets (ROA)	0,35	0,47	0,06	0,05	0,16

Return on investment (ROI)	29,46	29,43	4,31	7,47	4,58
Return on sales (ROS)	5,91	6,31	1,48	0,54	4,30
Return on equity (ROE)	37,15	39,61	19,44	39,87	36,99
Incid. Of expenses/Non-operating income(%)	126,10	134,60	451,52	n.s.	95,96
	2016	2017	2018	2019	2020
EBITDA	15.283.165	17.085.403	20.005.352	20.012.379	20.641.478
EBITDA/Sales	60,20	60,00	61,24	79,20	49,56
Return on assets (ROA)	0,04	0,16	0,38	0,29	0,27
Return on investment (ROI)	12,70	12,28	n.s.	n.s.	n.s.
Return on sales (ROS)	1,47	4,62	11,48	13,97	8,94
Return on equity (ROE)	35,65	28,64	44,65	28,14	20,31
Incid. Of expenses/Non-operating income(%)	252,12	80,66	79,64	74,22	63,69

Source: own elaboration on the basis of AIDA indicators.

The aim of profitability analysis is to assess the ability of a company to produce sufficient income to cover its costs and to generate profits.

The term EBITDA stands for Earnings Before Interest Taxes Depreciation and Amortisation. This term refers to the gross operating margin, which is an indicator used in the context of company and share valuation. It's the perfect indicator of company profitability; in fact it indicates what the operating profitability of a company is, taking into account only the part relating to the company's business in the strict sense. EBITDA is the most important measure of income because it's not influenced by investment policies, financing policies, extraordinary policies and tax policies. It's possible to observe that this index has steadily increased during the period under review, indicating that the profitability of the company has increased over time, with the exception of 2020, where it decreased probably due to the Covid situation.

This value, divided by the volume of sales, makes it possible to further define the profitability of the company. EBITDA/Sales expresses the company's true ability to stay in the market as it measures how much operating income it's able to generate per unit of turnover. In general, the objective of a company is to keep this ratio as high as possible, which indicates low costs of daily activities in relation to sales.

In the case of Infratel, this indicator shows a fluctuating trend which, however, generally remains around the same level of values. In order to understand whether this value is positive, it is necessary to compare it with the ones of Lepida. Lepida, like Infratel, also shows a fluctuating trend with regard to this indicator. In any case,

it remains by far the lowest. For example, for what concerns the year 2020, the following table shows the values taken into account to compute this margin.

Table 16: Infratel and Lepida’s EBITDA and Sales (2020).

	Infratel	Lepida
EBITDA	20.641.478	9.145.842
SALES	7.955.827	59.092.773

Source: own elaboration

The table shows that although Lepida’s EBITDA is significantly lower, Lepida has much higher sales in 2020 than Infratel. This is due to the fact that probably Lepida has lower administrative or personnel costs compared to the ones of Infratel. This means that Infratel to improve this margin, should reduce production, administrative or personnel costs. Indeed, this is also due to the way in which work in progress is managed, as Lepida will probably have a business that allows it to record sales immediately, whereas Infratel has a business that takes longer to build infrastructure. In fact, in 2020 the item “changes in contracts work in progress” amounts to 145 million for Infratel and 729k for Lepida.

Return on equity (ROE) expresses the return on equity, so the return on the shareholders’ own investment in the company.

$$ROE = \text{net income} / \text{net equity}$$

In general, ROE can be best appreciated when compared to average industry ROEs, on the assumption that the higher the value, the better the return on equity. In this case, the values of Infratel, will be analyzed as usual compared to the ones of Lepida. Infratel has a very high ROE compared to the one of Lepida, this means that probably the management of Infratel was good in allocate the internal resources to increase company profits. This is probably due to the fact that of course Infratel, having a broader business catchment area, it's able to attract more investors and so be more profitable than Lepida.

If ROE measures the profitability for shareholders, ROI (return on investment) measures the profitability of the company, i.e. the adequacy of the economic return in relation to the capital invested. ROI serves to ascertain whether the operating income produced by the company can adequately remunerate the investments made.

$$ROI = EBIT / Total\ assets$$

AIDA does not provide the calculation of the ROI in the years 2020, 2019, 2018 and in any case, in order to be able to determine the positivity or negativity of the same, it's necessary to compare it with the values of the index of Lepida.

Also in this case, the values of this index related to Infratel are higher than the ones of Lepida, but with one exception in the year 2013, where their values were very similar, probably because the EBIT of Infratel was lower than usual and because there were higher costs of production due to the start of broadband plan activities.

The return on assets (ROA) is conceptually similar to the ROI and differs in that the numerator is the profit for the year instead of the result from operations alone. It's aimed at comparing total income generated with total investments and measure the profitability of the assets. Together with ROE, ROA confirms the company's ability to create wealth for the investor. Like the other indices, the higher the better.

$$ROA = \text{net profit} / \text{total assets}$$

In this case, the values of this index for both companies considered, are similar over time as this ratio is related to the size and business of the two companies and takes into account the weight of taxes, which is also related to the size of the companies. The return on sales (ROS) expresses the profitability of sales, i.e. how much of the revenue is absorbed by operations.

$$ROS = EBIT / Revenues$$

ROS is a direct consequence of the ability of internal efficiency conditions and external market situations. The former affect the ability to contain costs, maintain economic equilibrium and achieve certain production volumes; the latter affect the dynamics of sales prices, purchase costs and trade variables.

The higher the ROS, the higher the profitability of the operating result.

In the case of Lepida, this is very low and generally decreasing compared to the first years under review, while in the case of Infratel, this shows a fluctuating trend. In general, both societies are efficient, capable of sustaining costs and generate income because their ROS are always higher than zero. But, in the case of Infratel,

due to the fact that the turnover is much higher, this ratio, especially in the last 4 years, is very positive.

In addition, indices relating to the company's productivity will also be commented on.

Table 17: Infratel's productivity indices.

PRODUCTIVITY INDICES					
	2011	2012	2013	2014	2015
Revenue per capita	445.420	598.040	392.950	635.780	298.360
Added value per capita	308.730	343.880	305.100	288.620	237.910
Labour costs per employee	60.260	63.920	70.950	70.820	60.470
Performance of employee	7,39	9,36	5,54	8,98	4,93
	2016	2017	2018	2019	2020
Revenue per capita	367.960	284.770	263.440	197.400	308.520
Added value per capita	289.730	232.930	222.670	217.200	211.530
Labour costs per employee	68.240	59.980	58.010	59.450	57.980
Performance of employee	5,39	4,75	4,54	3,32	5,32

Source: own elaboration on the basis of AIDA indicators.

Productivity indices are indicators of business productivity, i.e. they give an insight into whether or not production factors are used efficiently within the company.

These indices are constructed as a ratio between an achieved result and the means the company had to employ to achieve this result. The individual assessment of each of these indicators is of limited value; it's most effective when focusing on the trend.

The first index is the revenue per capita, where revenues should be taken net to of discounts, rebates, premiums and returns while, with regard to the number of employees used in the calculation of revenue per head, it should be noted that all employees of the company should be referred to, regardless of their level and functions.

$$\text{Revenue per capita} = \text{Revenue} + \text{Other income} / \text{Number of employees}$$

This index undergoes substantial changes throughout the decade under review. These changes are mainly due to the trend in revenue and not to the movement of heads in the same period, as otherwise they would follow the same steady growth trend as expressed in table 9 (only in 2015 there was a decrease compared to the previous year). It can be said that the index trend is therefore mainly determined by the trend in revenues, which in turn show peaks in 2012, 2014 and 2018, precisely where the value of this index is highest.

Value added per capita is obtained by taking into account the value added, given by the difference between the production value of the period and the consumption of materials and services of the same period and the number of employees of the year.

$$\text{Value added per capita} = \text{value added} / \text{number of employees}$$

As for revenue per capita, all other things being equal, value added per capita is lower in enterprises with large numbers of employees, while it's higher in enterprises with fewer employees. This index can have positive or negative values, in the case of Infratel, the index is always positive, which implies that the value of production is higher than the costs for the purchase of materials and services.

The labour cost index per employee indicates the average level of remuneration and obviously depends on the qualification of the employees and their specialization as the remuneration in these cases is higher.

$$\text{Labour costs per employee} = \text{total personnel costs} / \text{number of employees}$$

Analysing the trend, this value is maximum in the years 2013 and 2014, the years preceding the start of the first broadband plan. This value is probably due to the fact that the period required a high number of consultancies and specialized personnel for the initial design and implementation of the plan.

The employee performance index relates revenues to costs for personnel.

$$\text{Employee performance index} = \text{revenues} / \text{personnel costs}$$

The development of this index is rather erratic. The maximum is recorded in 2012 and in 2014, where probably the ratio was higher due to increased revenues.

3.4 Main results

In this section we will outline the results emerged from the previous analysis of the strategy, the financial statement of Infratel related to the progress of the broadband and ultra-broadband plans.

It's easy to understand that thanks to the public-private structure of Infratel and because of the favorable evaluation of the markets, the company is essentially in good health and going concern.

Since the telecommunications sector is constantly evolving and therefore requires major investments that will be profitable in the long term, it's essential for the in-house company in question, to know that it has ample funds and good solidity due to the fact that it has the State behind it.

The financial statement analysis of the company helps us understand how large the expenses are for companies that work in this kind of sector and not only for the construction of the infrastructure itself.

Operating in the telecommunication sector, especially at national level, means that there can be disputes and delays related to business, as in the case of Infratel. The delays are mainly due to the fact that in order to build the infrastructure it is necessary for Infratel to receive permits from the territorial authorities and disputes generally depend on the territorial authorities themselves usually for damages caused by events that may occur during the life cycle of the work sites. The risk of indebtedness of the company can be said to be high.

Another point to underline emerging from the financial analysis is staff-related. From the date under analysis to the present day, there has been a substantial increase in the number of staff, which obviously leads to an increase in staff costs and more. It turns out that not only Infratel's own employees are involved, but also the cost

that Infratel pays for consultancy and external processing, both to fully seconded individuals and to its parent company, Invitalia, is very high.

Moreover, the fact that Infratel has to comply with European standards and the fact that funds allocated to it depend on them, in some way directs and changes the company's strategy.

As already highlighted in the previous section, the fact that the company's strategy implies that it receives the consideration due to the work at the time of its completion, the company's liquidity is unable to meet its short term commitments with available resources. However, comparing the net working capital to the treasury margin, it was demonstrated that through the potential sale of inventories, Infratel's creditors can be satisfied in short term.

Moreover, the solidity analysis underlined that Infratel needs external funding to meet its expenses and investments. This is also due to the fact, as mentioned above, that the company operates in a particular sector, which requires large investments that become profitable only in the long term, i.e. when the works are completed. Although the payback is long-term, the construction of the infrastructure itself takes a long time.

For what concerns ROE, ROI, ROA and ROS, Infratel is in a very good position and so economically efficient. This is obviously linked to the size of the catchment area.

Conclusions

Regarding the ultra-broadband strategy in general, Italy is faced with significant shortcomings in both basic and advanced digital skills, which risk translating into the digital exclusion of a significant part of the population and the limit the capacity of enterprises to innovate. The National Digital Skills Strategy represents an important milestone and opportunity to narrow this gap. It is crucial to heighten the focus on human capital and continue efforts on education, reskilling and upskilling and training on the job in technology-intensive sectors.

In broadband deployment, the COVID-19 outbreak prompted the implementation of certain measures that have resulted in an acceleration of the ultra-broadband coverage into white areas also. However, more structural long-term solutions are needed to address the delays that still occur in rolling out the Italian ultra-broadband plan. It will also be important to translate the 5G readiness score into 5G coverage in populated areas and, to this end, to continue the structural reforms started in 2020 and implement the measures included in the national roadmap on the 5G connectivity toolbox.

Moreover, it must be considered that competition and regulation in broadband markets play a crucial role. Sometimes the presence of a relative good “legacy” infrastructure may represent a constrain to the development of NGN adoption. In the case of Italy, the classification of the areas in Clusters and the design of public support schemes, maybe for the timing and the development of technologies, should

have been more flexible and technologically neutral in order to assure scalability. Scalability is the possibility to move from one technical solution to a more advanced one when the latter becomes profitable, without incurring substantial adjustment costs. It is fundamental to underline the fact that the Italian strategy has correctly taken into account the complementarity of private investment and public support; the State aid scrutiny allows to use public funding as a residual tool when the market fails to deliver. It is implicit in this approach that a primary role is assigned to private operators with the public support entering when needed.

The part of public policies had a strong impact, since the tools of public support vary in the different clusters, it seems natural that regulation as well be adapted to the local competitive conditions.

Moreover it must be considered that the choice to define a very large number of territorial cells, assigning them to the different clusters is a solution that must be handled with care. Indeed, even in large and developed towns as Milan or Rome there are areas where the operators are not planning to invest. It could have been much easier to induce an operator that is planning to deploy a NGN's in a large part of the city to reach full coverage by giving public support in those parts that are otherwise not reached, rather than extrapolate and merge them with other similar white areas and assigning them through a procurement to a different operator. An alternative solution could have been to create geographical aggregates for the procurement auction on the basis of territorial continuity.

For what concerns the digital public services, overall, Italy continued to improve digital public services for citizens and enterprises. The legislative initiatives taken are expected to boost the adoption of enabling platforms by all public administrations, including local ones. The full deployment of the IO app, combined with the reinforcement of digital skills among the population, might also contribute to a gradual increase in the uptake of digital public services by the general public and by enterprises. Simplification efforts, measures to ensure interoperability and capacity building in the public administration are all important complementary measures to promote and reinforce the digitalization of public administration and public services.

Boosting the digital economy requires a coordinated and comprehensive approach which combines investment incentives, support services and awareness raising, and builds strong links with investments in human capital. To achieve a long-lasting transformation, it is important to continue efforts to build capacity among Italian enterprises, equipping people with relevant advanced digital skills and in parallel creating opportunities for young people and high-quality jobs. It is also important that Italy continues its efforts in advanced digital technologies and develops strategic capacities.

Low-skilled staff is also a key problem of the Infratel's strategy. In fact, as the above analysis shows, personnel costs are one of the main costs incurred by the company and have been steadily increasing over time. The workforce has grown

significantly from 2011 to 2020, from 39 to 140 people. This increase is reflected in staff costs, which rise from around 2 million in 2011 to around 7 million in 2020. Of course, this increase is in line with the implementation of the plans and the increasing work resulting from them, but it should be considered also the costs of the external consultancies: it is reflected in the costs of services, which increased from the first year of analysis to 2020 by 155 million. A large part of the costs for services are made up of the item “collaborators and other personnel costs”. One of these could be that the company, unable to find workers skilled enough to do the work themselves, often had to pay for external consultancy, leading to very high labor costs. The other reason may be that the company may not have invest sufficiently before in training its employees, not considering the fact that the cost of training would be repaid in the medium to long term through the success of the employees without the involvement of paid third parties. Probably, this unbalanced employment of resources was also possible due to the fact that society tends to be covered by the State.

Infratel is an in-house company, so the fact that the company can also rely on State resources has both pros and cons. Such a structure does not allow the company to be as efficient as possible, avoiding the waste of resources, including European ones, even though, despite the costs, it has been profitable from the start.

Infratel has only exploited the fact that it’s an in-house company economically. The fact that many of the works have been delayed due to lawsuits or permits has led to

the company incurring unnecessary costs. Of course, there can be unforeseen events, but if it had had a State behind it that was capable of drawing up a strategy whereby agreements with the regions and other local authorities were made before implementing the plan, misallocation of resources and inefficiency would have been avoided.

Obviously Infratel, being a private company with a public mission, had to adapt its activity to include business lines that might be not so profitable, such as the SINFI. In fact, the company has to provide services that a private company would certainly not have offered due to the trade-off between costs and revenues. Being state-led, the priority remains welfare and public service.

In conclusion, Infratel can claim to be sound as it is covered and supported by the State and both European and State funds. Considering that the market in which Infratel operates is very complex and requires large investments and that in Italy there were probably no companies able to cope with certain expenses for the construction of the infrastructure, since most Italian companies are SMEs, the establishment of an in-house company appears to be the best option. Leaving competition between companies within the Italian territory would probably not have led to the results that Infratel's activity led to and the State would not have had the same kind of control over the management of funds and works. However, it should be emphasized that the management of the funds has not been too careful; more use could have been made of these funds to educate and train staff in order to

avoid wasting money on consultancies and external staff and to try to limit errors in the execution of the works, which then lead to court cases and hence delays in the works.

Infratel and the in-house model is nowadays the best possible solution to fill the gap in network infrastructure of our country but should try to perform better economically, paying attention to misspending of resources and the costs involved, and trying to build a better and if necessary more regulated relationship with the Regions. Infratel should shift part of its core business to people and their realization and training, like other successful European countries, since to succeed and be efficient, people should be the focus of the business. Infratel's focus should not only be to work towards the goals that the State and the European Union impose for the welfare of the community, but should also focus on understanding how to evolve further, trying to be as flexible as possible, ensuring business continuity that goes beyond national plans. This flexibility is also given by the people who make it up.

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Appendix A

Detail of advances by region as at 31.12.2020, retrieved from Infratel explanatory notes as at 31.12.2020.

ADVANCE PAYMENTS	BALANCE at 31.12.2020
Regione Abruzzo Feasr Mod.A	12.500.000
Regione Abruzzo Parfa Mod.A	-
Regione Calabria Feasr	2.201.051
Regione Calabria Fesr	1.058.272
Regione Calabria Fes Mod.A	6.868.757
Regione Lazio Feasr Mod.A	112.117
Regione Lazio Commessa WIFI	321.293
Regione Lombardia Fesr Mod.A	26.439
Regione Lombardia Fas	450.751
Monza Varese FAS	1.065.574
Regione Molise Feasr	- 73
Regione Marche Feasr Mod.A	874.617
Regione Piemonte Feasr	516.495
Regione Puglia Feasr	2.177.301
Regione Puglia Feasr Mod.A	13.184.636
Regione Sardegna Feasr Mod.A	2.598.335
Regione Sicilia Fas	77.049
Regione Toscana FEASR Bulm	310.425
Regione Toscana FESR	144.843
Regione Toscana FESR Quinto intervento	304.805
Regione Toscana FESR Mod.A	4.952.990
Regione Toscana Fas	693.188
Regione Umbria Fesr Quinto intervento	-
Regione Umbria Fas	-
Regione Veneto Fesr	57.596
Autovie Venete S.p.A	5.097
Advance payments from others	14.274
TOTAL	50.515.832

Appendix B

Infratel's Balance sheet and Profit and Loss account

	Balance sheet											
	31/12/2020	31/12/2021	31/12/2018	31/12/2021	31/12/2016	31/12/2015	31/12/2021	31/12/2021	31/12/2021	31/12/2021	31/12/2021	31/12/2021
	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR
Assets												
A. TOTAL receivables due from shareholders	0	0	0	0	0	0	0	0	0	0	0	0
Called share capital	0	0	0	0	0	0	0	0	0	0	0	0
B. TOTAL FIXED ASSETS	166.616.984	180.207.106	194.056.928	203.754.177	211.832.691	207.441.312	189.301.531	186.602.701	184.270.956	164.379.146		
B.I. TOTAL INTANGIBLE FIXED ASSETS	25.311.911	28.539.760	31.434.330	32.371.822	34.328.328	31.675.875	23.090.116	23.101.233	23.047.212	18.526.767		
B.I.1. Start-up and expansion costs	0	0	0	0	0	0	0	0	0	0		
B.I.2. Research and dev. exp.	0	0	0	0	0	0	0	0	0	0		
B.I.3. Ind. patents and intellect. property rights	0	0	0	0	0	0	0	0	0	0		
B.I.4. Concessions, licenses, trademarks and similar rights	24.272.256	27.020.645	30.137.391	32.109.057	34.328.328	31.492.101	22.906.342	22.917.459	22.298.088	18.512.682		
B.I.5. Goodwill/Consolidation Difference including: Goodwill	0	0	0	0	0	0	0	183.774	0	0		
B.I.6. Additions in progress and advances	0	225.000	1.296.939	0	0	183.774	183.774	0	749.124	14.085		
B.I.7. Others (Amortization provision)	1.039.655	1.314.115	0	262.765	0	0	0	0	0	0		
B.II. TOTAL TANGIBLE FIXED ASSETS	139.770.571	150.140.551	161.116.294	169.900.318	177.504.363	175.765.437	166.211.415	163.501.468	161.223.744	145.852.379		
including: leased tangible assets	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.		
B.II.1. Land and buildings	0	0	0	0	0	0	0	0	0	0		
B.II.2. Plant and machinery	0	0	0	0	0	0	0	0	0	0		
B.II.3. Indust. and commercial equipment	135.781.666	147.834.408	156.998.654	166.192.915	174.020.498	168.529.637	163.420.688	161.780.005	158.411.482	142.692.997		
B.II.4. Other assets	1.731.748	0	0	0	0	1.249	1.249	6.324	14.121	23.059		
B.II.5. Additions in progress and advances (Depreciation provision)	2.257.157	2.306.143	4.117.640	3.707.403	3.483.865	7.234.551	2.789.478	1.715.139	2.798.141	3.136.323		
B.III. TOTAL FINANCIAL FIXED ASSETS	1.534.502	1.506.795	1.506.304	1.482.037	0	0	0	0	0	0		
including: short term	0	0	0	0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.		
B.III.1. Total equity investments	0	0	0	0	0	0	0	0	0	0		
B.III.1.a. Subsidiary companies	0	0	0	0	0	0	0	0	0	0		
B.III.1.b. Associated companies	0	0	0	0	0	0	0	0	0	0		
B.III.1.c. Parent companies	0	0	0	0	0	0	0	0	0	0		
B.III.1.d. Companies under parent companies control	0	0	0	0	0	0	n.a.	n.a.	n.a.	n.a.		
B.III.1.d.bis. Other companies	0	0	0	0	0	0	0	0	0	0		
B.III.2. Total Receivables	1.534.502	1.506.795	1.506.304	1.482.037	0	0	0	0	0	0		
B.III.2.a. Due from subsidiary comp.	0	0	0	0	0	0	0	0	0	0		
B.III.2.a. Due from subs. comp. - beyond 12 months	0	0	0	0	0	0	0	0	0	0		
B.III.2.b. Due from assoc. comp.	0	0	0	0	0	0	0	0	0	0		
B.III.2.b. Due from assoc. comp. - beyond 12 months	0	0	0	0	0	0	0	0	0	0		
B.III.2.c. Due from parent comp.	0	0	0	0	0	0	0	0	0	0		
B.III.2.c. Due from parent comp. - beyond 12 months	0	0	0	0	0	0	0	0	0	0		
B.III.2.d. Due from comp. under parent companies	0	0	0	0	0	0	n.a.	n.a.	n.a.	n.a.		
B.III.2.d. Due from comp. under parent companies	0	0	0	0	0	0	n.a.	n.a.	n.a.	n.a.		
B.III.2.d.bis. Due from other comp.	0	0	0	0	0	0	0	0	0	0		
B.III.2.d.bis. Due from other comp. - beyond 12 months	1.534.502	1.506.795	1.506.304	1.482.037	0	0	0	0	0	0		
B.III. FINANCIAL RECEIV. WITHIN 12 MONTHS	0	0	0	0	0	0	0	0	0	0		
B.III. FINANCIAL RECEIV. BEYOND 12 MONTHS	1.534.502	1.506.795	1.506.304	1.482.037	0	0	0	0	0	0		
B.III.3. Other securities	0	0	0	0	0	0	0	0	0	0		
B.III.3.bis. Own shares	0	0	0	0	0	0	0	0	0	0		
B.III.4. Derivatives	0	0	0	0	0	0	0	0	0	0		
Own shares: par value	0	0	0	0	0	0	0	0	0	0		

	31/12/2020	31/12/2021	31/12/2018	31/12/2019	31/12/2020	31/12/2021	31/12/2018	31/12/2019	31/12/2020	31/12/2021	31/12/2018	31/12/2019	31/12/2020	31/12/2021	31/12/2018	31/12/2019	31/12/2020	31/12/2021	
	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR
C. TOTAL CURRENT ASSETS	1.213.744.051	1.040.189.898	787.775.086	630.351.376	631.372.842	442.797.273	277.582.359	299.070.238	177.172.921	125.069.089									
C.I. TOTAL INVENTORIES	731.515.730	585.732.738	406.800.885	256.822.141	231.462.101	219.078.239	151.123.110	114.182.990	60.602.974	47.428.377									
C.I.1. Raw and consumable materials	0	0	0	0	0	0	0	0	0	0									
C.I.2. Work in progress and semifinished products	0	0	0	0	0	0	0	0	0	0									
C.I.3. Contract work in progress	731.515.730	585.732.738	406.800.885	256.779.637	231.419.597	219.035.735	151.080.606	114.008.993	60.442.549	47.265.571									
C.I.4. Finished products and goods	0	0	0	42.504	42.504	42.504	42.504	173.997	160.425	162.806									
C.I.5. Advances	0	0	0	0	0	0	0	0	0	0									
Tangible fixed assets to be sold	0	0	0	0	0	0	0	0	0	0									
C.II. TOTAL RECEIVABLES	77.381.400	131.068.263	97.174.115	75.135.187	67.271.311	89.931.465	52.326.394	46.638.060	52.756.797	45.401.501									
C.II.1. Trade accounts	43.065.709	59.996.239	49.825.565	36.300.602	26.761.522	54.029.420	26.404.288	26.093.265	22.199.425	16.847.158									
C.II.1. Trade accounts - beyond 12 months	0	0	0	0	0	0	0	0	0	0									
C.II.2. Due from subs. comp.	0	0	0	0	0	0	0	0	0	0									
C.II.2. Due from subs. comp. - beyond 12 months	0	0	0	0	0	0	0	0	0	0									
C.II.3. Due from assoc. comp.	0	0	0	0	0	0	0	0	0	0									
C.II.3. Due from assoc. comp. - beyond 12 months	0	0	0	0	0	0	0	0	0	0									
C.II.4. Due from parent comp.	1.287	1.287	14.021	755.312	1.820.605	499.909	454.725	305.162	192.147	177.826									
C.II.4. Due from parent comp. - beyond 12 months	0	0	0	0	0	0	0	0	0	0									
C.II.5. Due from comp. under parent companies	0	0	0	0	0	0	0	0	0	0									
C.II.5. Due from comp. under parent companies	0	0	0	0	0	0	0	0	0	0									
C.II.5. bis. Tax receivables	51.907	1.050.260	12.333.923	22.256.970	22.350.355	18.662.774	11.415.815	7.386.643	16.690.657	19.680.758									
C.II.5. bis. Tax receiv. - beyond 12 months	0	0	0	0	0	0	0	0	0	0									
C.II.5. ter. Tax receiv. for prepaid taxes	339.103	1.477.947	1.629.350	1.709.928	1.992.768	1.771.214	1.694.822	1.452.136	1.037.715	745.781									
C.II.5. ter. Tax receiv. for prepaid taxes - beyond 12 months	668.086	0	0	0	0	0	0	0	0	0									
C.II.5. quarter. Receiv. due from others	37.918.118	68.142.381	33.005.155	13.785.584	14.346.061	13.666.217	12.356.744	11.113.368	12.262.116	7.707.605									
C.II.5. quarter. Receiv. due from others - beyond 12 months	337.190	400.149	366.101	326.791	67.271.311	88.629.334	52.326.394	46.350.574	52.382.060	45.159.128									
C.II.5. quarter. Receiv. due from others - beyond 12 months	76.376.124	130.668.114	96.808.014	74.808.396	67.271.311	88.629.334	52.326.394	46.350.574	52.382.060	45.159.128									
Amounts due for advance taxation	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.									
C.II. RECEIV. DUE BEYOND 12 MONTHS	1.005.276	400.149	366.101	326.791	67.271.311	88.629.334	52.326.394	46.350.574	52.382.060	45.159.128									
C.III. TOTAL FINANCIAL ASSETS	0	0	0	0	0	0	0	0	0	0									
C.III.1. Invest. in subs. comp.	0	0	0	0	0	0	0	0	0	0									
C.III.2. Invest. in assoc. comp.	0	0	0	0	0	0	0	0	0	0									
C.III.3. Invest. in parent comp.	0	0	0	0	0	0	0	0	0	0									
C.III.3. bis. Invest. in comp. under parent companies control	0	0	0	0	0	0	0	0	0	0									
C.III.4. Other investments	0	0	0	0	0	0	0	0	0	0									
C.III.4. bis. Own shares	0	0	0	0	0	0	0	0	0	0									
Own shares: par value	0	0	0	0	0	0	0	0	0	0									
C.III.5. Derivatives	0	0	0	0	0	0	0	0	0	0									
C.III.6. Other securities	0	0	0	0	0	0	0	0	0	0									
C.III.7. Financial instruments for cash pooling	0	0	0	0	0	0	0	0	0	0									
C.IV. TOTAL LIQUID FUNDS	404.846.921	323.388.877	283.800.086	298.394.048	332.639.430	133.787.569	74.132.855	138.249.188	63.813.150	32.239.211									
C.IV.1. Bank and postal deposits	404.842.620	323.383.580	283.795.450	298.393.019	332.638.946	133.787.301	74.132.739	138.248.913	63.812.755	32.239.010									
C.IV.2. Checks	0	0	0	0	0	0	0	0	0	0									
C.IV.3. Cash and cash equivalents	4.301	5.297	4.636	1.029	484	268	116	275	395	201									
D. TOTAL ACCRUED INCOME AND PREPAID EXPENSES	10.085.787	4.058.028	7.820.900	5.763.492	7.087.016	5.507.866	344.047	108.840	79.795	0									
Accrued income and prepaid exp.	0	n.a.	0	n.a.	0	0	n.a.	n.a.	n.a.	0									
TOTAL ASSETS	1.390.446.822	1.224.455.032	989.652.914	839.869.045	850.292.549	655.746.451	467.227.937	485.781.779	361.523.672	289.448.235									

Liabilities	31/12/2020	31/12/2021	31/12/2018	31/12/2021	31/12/2016	31/12/2015	31/12/2021	31/12/2021	31/12/2021	31/12/2011
	EUR									
Shareholders' funds										
A. TOTAL SHAREHOLDERS' FUNDS	11.679.081	9.307.445	6.688.309	3.702.233	2.641.791	2.698.132	2.827.326	7.168.587	5.774.664	3.487.531
A.I. Capital stock	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000
including: Prepaid call from shareholders	500.000	0	0	500.000	500.000	n.a.	n.a.	500.000	n.a.	n.a.
including: Deposits for future capital increase	0	0	0	0	0	500.000	500.000	n.a.	500.000	n.a.
including: Deposits for capital	0	500.000	500.000	0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
including: Deposits for loss covering	0	0	0	0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
A.II. Share premium reserve	0	0	0	0	0	0	0	0	0	0
A.III. Revaluation reserves	0	0	0	0	0	0	0	0	0	0
A.IV. Legal reserve	200.000	200.000	200.000	200.000	200.000	200.000	200.000	292.518	178.161	113.387
A.V. Statutory reserves	0	0	0	0	0	0	0	0	0	0
Reserve for treasury stock	0	0	0	0	0	0	0	0	0	0
A.VI. Other reserves	500.000	500.000	500.000	500.000	500.000	500.000	500.000	4.128.336	500.000	500.000
GROUP consolidation reserve	n.a.									
A.VII. Reserve for expected cash flow hedge	0	0	0	0	0	0	0	0	0	0
A.VIII. Retained earnings (losses)	7.607.445	4.988.309	2.002.233	941.791	0	0	0	353.810	1.809.370	578.680
A.IX. Profit (loss) for the year	2.371.636	2.619.136	2.986.076	1.060.442	941.791	998.132	1.127.326	1.393.923	2.287.133	1.295.464
Dividend down payment	0	0	0	0	0	0	0	0	0	0
Partial covering for loss of the year	0	0	0	0	0	0	0	0	0	0
A.X. Negative reserves for own shares (+/-)	0	0	0	0	0	0	0	0	0	0
Group capital stock and reserves	n.a.									
Minority interests in cap. and reserves	n.a.									
including: deferred taxes	0	0	0	0	0	0	0	0	0	0
Minority interests in profit (loss) for the year	n.a.									
MINORITY INTERESTS SHAREHOLDERS' FUNDS	n.a.									
B. TOTAL PROVISIONS FOR RISKS AND	1.639.500	1.552.000	1.372.000	992.000	782.000	782.000	1.132.000	1.376.068	926.066	526.066
B.1. Employee pensions and similar obligations	0	0	0	0	0	0	0	0	0	0
B.2. Taxation (including deferred taxation)	0	0	0	0	0	0	0	14.068	14.066	14.066
B.3. Derivative liabilities	0	0	0	0	0	0	n.a.	n.a.	n.a.	n.a.
B.4. Other provisions	1.639.500	1.552.000	1.372.000	992.000	782.000	782.000	1.132.000	1.362.000	912.000	512.000
of which: consolidation provision	n.a.									
C. SEVERANCE INDEMNITY RESERVE	1.820.243	1.741.023	1.579.029	1.339.843	1.237.429	1.153.701	974.502	755.671	583.263	

	31/12/2020	31/12/2021	31/12/2018	31/12/2021	31/12/2016	31/12/2015	31/12/2021	31/12/2021	31/12/2011
	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR
Payables									
D. TOTAL PAYABLES	1.195.536.128	1.017.665.375	623.047.559	464.368.783	471.699.739	435.047.575	259.569.119	274.035.545	155.414.171
D.1. Bonds	0	0	0	0	0	0	0	0	0
D.1.1. Bonds beyond 12 months	0	0	0	0	0	0	0	0	0
D.2. Convertible bonds	0	0	0	0	0	0	0	0	0
D.2.1. Convertible bonds - beyond 12 months	0	0	0	0	0	0	0	0	0
D.3. Due to shareholders for loans	0	0	0	0	0	0	0	0	0
D.3.1. Due to shareholders for loans - beyond 12 months	0	0	0	0	0	0	0	0	0
D.4. Due to banks	900	900	900	7.000.000	300.000	20.016.948	0	0	0
D.4.1. Due to banks - beyond 12 months	0	0	0	0	0	0	0	0	0
D.5. Due to other lenders	0	0	0	0	0	0	0	0	0
D.5.1. Due to other lenders - beyond 12 months	0	0	0	0	0	0	0	0	0
D.6. Advances	50.515.832	591.032.204	426.508.195	324.915.174	305.598.239	247.614.724	141.193.137	134.661.538	95.022.414
D.6.1. Advances - beyond 12 months	563.688.973	160.672.375	62.258.038	71.918.735	54.327.409	49.075.622	58.174.505	71.360.460	40.059.801
D.7. Due to suppliers	0	0	0	0	0	0	0	0	0
D.7.1. Due to suppliers - beyond 12 months	0	0	0	0	0	0	0	0	0
D.8. Negotiable instruments	0	0	0	0	0	0	0	0	0
D.8.1. Negotiable instruments - beyond 12 months	0	0	0	0	0	0	0	0	0
D.9. Due to subsidiary companies	0	0	0	0	0	0	0	0	0
D.9.1. Due to subsidiary companies - beyond 12 months	0	0	0	0	0	0	0	0	0
D.10. Due to associated companies	0	0	0	0	0	0	0	0	0
D.10.1. Due to associated companies - beyond 12 months	0	0	0	0	0	0	0	0	0
D.11. Due to parent companies	29.501.199	26.662.032	24.055.841	22.223.026	20.918.582	15.662.893	12.050.908	8.824.139	10.047.543
D.11.1. Due to parent companies beyond 12 months	0	0	0	0	0	0	0	0	0
D.11.bis. Due to comp. under parent companies control	131.584	131.584	131.584	131.584	131.584	n.a.	n.a.	n.a.	n.a.
D.11.bis.1. Due to comp. under parent companies control - beyond 12 month	0	0	0	0	0	0	0	0	0
D.12. Tax payable	262.902	206.393	474.988	493.137	141.006	206.752	179.367	104.909	83.783
D.12.1. Tax payable beyond 12 months	0	0	0	0	0	0	0	0	0
D.13. Due to social security institutions	369.568	370.156	357.817	319.725	216.245	218.946	228.911	191.939	148.383
D.13.1. Due to social security institutions - beyond 12 months	0	0	0	0	0	0	0	0	0
D.14. Other payables	390.392.795	337.004.068	99.599.499	72.072.841	90.066.674	102.251.690	47.742.291	58.892.560	10.052.247
D.14.1. Other payables beyond 12 months	0	0	0	0	0	0	0	0	0
D. Pavables due within 12 months	631.847.155	1.017.665.375	623.047.559	464.368.783	471.699.739	435.047.575	259.569.119	274.035.545	155.414.171
D. Pavables due beyond 12 months	563.688.973	0	0	0	0	0	0	0	0
Total payables during period	631.847.155	1.017.665.375	623.047.559	464.368.783	471.699.739	435.047.575	259.569.119	274.035.545	155.414.171
Total payables after period	563.688.973	0	0	0	0	0	0	0	0
E. TOTAL ACCRUED EXPENSES AND DEFERRED INCOME									
Fees on loans	0	n.a.	0	n.a.	n.a.	0	n.a.	n.a.	n.a.
TOTAL LIABILITIES AND SHAREHOLDERS'	1.390.446.822	1.224.455.032	989.652.914	839.869.045	850.292.549	655.746.451	467.227.937	485.781.779	361.523.672
TOTAL MEMORANDUM ACCOUNTS	0	0	0	0	0	11.111.825	16.789.690	2.359.676	14.224.836
TOTAL WARRANTIES SUPPLIED	0	0	0	0	0	n.a.	n.a.	n.a.	n.a.

Unconsolidated	Profit and loss account											
	31/12/2020	31/12/2021	31/12/2018	31/12/2019	31/12/2016	31/12/2015	31/12/2020	31/12/2021	31/12/2018	31/12/2019	31/12/2016	31/12/2015
	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR
A. TOTAL VALUE OF PRODUCTION	187.433.060	204.198.841	182.687.932	53.837.123	37.773.221	92.203.165	76.489.724	74.392.946	40.088.724	33.613.833	0	0
A.1. Revenues from sales and services	7.955.827	6.949.499	8.595.261	4.481.949	4.063.473	3.789.286	19.939.948	2.697.505	10.668.398	4.048.331	0	0
A.2. Changes in inventories	0	0	0	0	0	0	0	0	0	0	0	0
A.3. Changes in contract work in progress	145.782.972	178.931.872	150.021.248	25.360.041	12.383.862	68.036.402	37.071.613	53.566.444	13.176.978	16.242.336	0	0
A.2 + A.3. Total changes	145.782.972	178.931.872	150.021.248	25.360.041	12.383.862	68.036.402	37.071.613	53.566.444	13.176.978	16.242.336	0	0
A.4. Additions to fixed assets	33.694.261	18.317.470	24.071.423	23.995.133	21.325.886	20.377.477	19.478.163	18.128.997	16.243.348	13.323.166	0	0
A.5. Other revenue operating grants	9.709.498	4.713.239	3.708.907	8.450.317	4.437.964	4.408.022	6.692.487	6.307.869	5.609.504	4.746.842	0	0
B. TOTAL PRODUCTION COSTS	183.709.570	200.669.844	178.938.438	52.522.413	37.399.678	91.163.015	76.278.516	74.084.225	38.389.507	32.586.527	0	0
B.6. Raw, consum. mat. and goods for resale	333.975	90.975	49.914	112.070	55.330	19.158	52.554.162	52.511.803	20.782.881	17.869.295	0	0
B.7. Services	158.063.493	175.842.247	154.280.544	29.446.874	16.431.810	71.029.603	4.106.612	3.989.240	2.587.168	2.471.626	0	0
B.8. Use of third parties assets	140.735	130.848	300.448	516.276	86.758	189.439	662.597	536.247	268.942	618.713	0	0
B.9. Total personnel costs	7.826.955	7.609.616	7.193.315	5.997.779	4.708.403	4.898.092	4.391.101	3.760.219	2.876.611	2.350.025	0	0
B.9.a. Wages and salaries	5.730.520	5.638.523	5.269.735	4.438.530	3.331.775	3.510.275	3.125.389	2.587.070	2.016.012	1.631.267	0	0
B.9.b. Social security charges	1.540.419	1.468.880	1.493.022	1.234.754	909.651	1.011.582	971.774	780.526	614.201	567.318	0	0
B.9.c. Severance indemnities	556.016	502.213	430.558	324.495	465.952	288.708	231.580	202.314	163.605	138.035	0	0
B.9.d. Pensions and similar obligations	0	0	0	0	0	0	0	0	0	0	0	0
B.9.e. Other costs	0	0	0	0	1.025	87.527	62.338	190.309	82.793	13.405	0	0
B.9.f. Severance indemnity + Pension + Other	556.016	502.213	430.558	324.495	466.977	376.235	293.938	392.623	246.398	151.440	0	0
B.10. Total depreciation, amortization and	16.917.988	16.483.382	16.255.858	15.770.693	14.909.622	13.332.117	13.292.189	11.651.355	10.498.616	8.553.228	0	0
B.10.a. Amort. of intangible fixed assets	3.886.733	3.597.018	3.567.053	3.293.516	3.013.929	2.317.207	2.020.017	1.904.993	1.685.928	1.288.315	0	0
B.10.b. Depn. of tangible fixed assets	13.031.255	12.876.632	12.677.500	12.464.756	11.740.662	10.944.483	9.969.303	9.746.362	8.812.688	7.264.913	0	0
B.10.c. Writedown of fixed assets	0	0	18.078	12.421	155.031	0	571.625	0	0	0	0	0
B.10.a-b+c. Depreciation, amortization and	16.917.988	16.473.650	16.062.631	15.770.693	14.909.622	13.261.690	12.560.945	11.651.355	10.498.616	8.553.228	0	0
B.10.d. Writedown of receivables	0	9.732	193.227	0	0	70.427	731.244	0	0	0	0	0
B.11. Change in inventory of raw and consumable	0	0	0	0	0	0	0	0	0	0	0	0
B.12. Provisions for risks and charges	87.500	180.000	412.487	210.000	0	0	0	450.000	400.000	110.000	0	0
B.13. Other provisions	0	0	0	0	0	0	0	0	0	0	0	0
B.14. Other operating expenses	338.924	332.776	452.872	468.721	1.207.755	1.694.606	1.271.855	1.185.361	975.289	613.640	0	0
OPERATING MARGIN	3.723.490	3.528.997	3.749.494	1.314.710	373.543	1.040.150	2.11.208	308.721	1.699.217	1.027.306	0	0
Added Value	28.555.933	27.801.995	27.611.154	23.293.182	19.991.568	19.270.359	17.894.498	16.170.295	15.474.444	12.040.559	0	0
C. TOTAL FINANCIAL INCOME AND CHARGES	131.415	364.057	595.435	946.677	1.111.694	1.024.917	1.826.207	1.693.232	1.574.241	853.563	0	0
C.15. Total income from equity investments	0	0	0	0	0	0	0	0	0	0	0	0
of which: from subsidiaries, associated, parent	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
and ctes under parent ctes control	0	0	0	0	0	0	0	0	0	0	0	0
of which: from parent companies	0	0	0	0	0	0	0	0	0	0	0	0
of which: from companies under parent companies	0	0	0	0	0	0	0	0	0	0	0	0
C.16. Total other financial income	137.472	450.924	650.271	974.543	1.173.454	1.087.159	1.865.766	1.851.023	1.716.809	857.872	0	0
C.16.a. From financial receivables	0	0	0	0	0	0	0	0	0	0	0	0
of which: from subsidiaries, associated, parent	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
of which: from companies under parent	0	0	0	0	0	0	0	0	0	0	0	0
C.16.b. From securities held as fixed assets	0	0	0	0	0	0	0	0	0	0	0	0
C.16.c. From securities held as current assets	0	0	0	0	0	0	0	0	0	0	0	0
C.16.b+c. From securities	0	0	0	0	0	0	0	0	0	0	0	0
C.16.d. Income other than the above	137.472	450.924	650.271	974.543	1.173.454	1.087.159	1.865.766	1.851.023	1.716.809	857.872	0	0
of which: from subsidiaries, associated, parent	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
of which: from companies under parent	0	0	0	0	0	0	0	0	0	0	0	0
C.17. Total financial charges	6.057	86.867	54.836	27.866	61.760	62.242	39.559	157.791	142.568	4.509	0	0
of which: from financial receivables subs and	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
of which: from companies under parent companies	0	0	0	0	0	0	0	0	0	0	0	0
C.17.bis Profit and Loss on Foreign Exchange	0	0	0	0	0	0	0	0	0	0	0	0

	31/12/2020	31/12/201	31/12/2018	31/12/201	31/12/2016	31/12/2015	31/12/201	31/12/201	31/12/201	31/12/2011
	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR
D. TOTAL FINANCIAL ASSETS ADJUSTMENTS										
D.18. Total Revaluations	0	0	0	0	0	0	0	0	0	0
D.18.a. Reval. of equity investments	0	0	0	0	0	0	0	0	0	0
D.18.b. Reval. of other financial assets	0	0	0	0	0	0	0	0	0	0
D.18.c. Reval. of securities	0	0	0	0	0	0	0	0	0	0
D.18.d. Reval. of derivatives	0	0	0	0	0	n.a.	n.a.	n.a.	n.a.	n.a.
Reval. of financial instruments for cash pooling	0	0	0	0	0	n.a.	n.a.	n.a.	n.a.	n.a.
D.19. Total Writedowns	0	0	0	0	0	0	0	0	0	0
D.19.a. Writedowns of equity invest.	0	0	0	0	0	0	0	0	0	0
D.19.b. Writedowns of other fin. Ass.	0	0	0	0	0	0	0	0	0	0
D.19.c. Writedowns of securities	0	0	0	0	0	0	0	0	0	0
D.19.d. Writedowns of derivatives	0	0	0	0	0	0	0	0	0	0
Writedowns of financial instruments for cash pooling	0	0	0	0	0	n.a.	n.a.	n.a.	n.a.	n.a.
TOTAL EXTRAORDINARY REVENUES AND CHARGES	0	0	0	0	0	-103.326	-15.393	0	14.228	46.577
Extraordinary revenues of which capital gains	0	0	0	0	0	0	78.952	0	20.253	61.426
Extraordinary charges of which capital losses of which taxes previous period	0	0	0	0	0	103.326	94.345	0	6.025	14.849
	0	0	0	0	0	0	n.a.	0	n.a.	n.a.
	0	0	0	0	0	0	n.a.	0	n.a.	n.a.
PROFIT/LOSS BEFORE TAXATION	3.854.905	3.893.054	4.344.929	2.261.387	1.485.237	1.961.741	2.022.022	2.001.953	3.287.686	1.927.246
20. Total current, deferred and prepaid income taxes	1.483.269	1.273.918	1.358.853	1.200.945	543.446	963.609	894.696	608.030	1.000.553	631.782
Current taxes	1.112.000	1.230.000	1.465.000	895.000	765.000	1.040.000	1.151.448	1.022.451	1.292.487	879.314
Taxation related to previous years	-99.489	-16.075	-186.725	23.106	0	n.a.	n.a.	n.a.	n.a.	n.a.
Prepaid and deferred taxes	470.758	151.403	80.578	282.839	-221.554	-76.391	-256.752	-414.421	-291.934	-247.532
deferred taxation (+/-) advance taxation (+/-)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-14.066	n.a.	n.a.	n.a.
Income (expenses) for adherence to fiscal transparency regime	0	-91.410	0	0	n.a.	-76.391	-242.686	n.a.	-291.934	n.a.
21. PROFIT (LOSS) THIRD PARTIES	2.371.636	2.619.136	2.986.076	1.060.442	941.791	998.132	1.127.326	1.393.923	2.287.133	1.295.464
PROFIT (LOSS) GROUP	2.371.636	2.619.136	2.986.076	1.060.442	941.791	998.132	1.127.326	1.393.923	2.287.133	1.295.464

Appendix C

Lepida's Balance sheet and Profit and Loss account

	Balance sheet											
	31/12/2020	31/12/2021	31/12/2018	31/12/2017	31/12/2016	31/12/2015	31/12/2013	31/12/2011	31/12/2010	31/12/2009	31/12/2008	31/12/2007
Assets	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR
A. TOTAL receivables due from shareholders	46	46	0	0	0	0	0	0	0	0	0	0
Called share capital	46	46	0	0	0	0	0	0	0	0	0	0
B. TOTAL FIXED ASSETS	55.876.773	53.674.306	55.123.214	56.185.601	57.404.597	52.930.764	31.431.700	13.897.367	14.884.142	14.884.142	14.884.142	14.884.142
B.I. TOTAL INTANGIBLE FIXED ASSETS	2.745.853	1.749.656	2.231.674	3.360.729	4.207.886	4.655.657	6.127.499	4.289.495	1.158.353	1.158.353	1.158.353	1.269.415
B.I.1. Start-up and expansion costs	0	0	0	0	0	0	66	197	7.601	7.601	7.601	15.005
B.I.2. Research and dev. exp.	0	0	0	0	0	0	0	0	0	0	0	0
B.I.3. Ind. patents and intellect. property rights	1.274.083	398.402	426.407	968.127	1.244.980	890.723	1.568.965	2.162.227	3.252	3.252	3.252	7.010
B.I.4. Concessions, licenses, trademarks and similar rights	0	45	0	0	0	0	0	0	0	0	0	0
B.I.5. Goodwill/Consolidation Difference including: Goodwill	348.300	448.200	845.964	1.547.048	2.459.940	3.372.832	4.285.624	2.127.071	1.147.500	1.147.500	1.147.500	1.247.400
B.I.6. Additions in progress and advances	348.300	448.200	845.964	1.547.048	2.459.940	3.372.832	4.285.624	2.127.071	1.147.500	1.147.500	1.147.500	n.a.
B.I.7. Others	1.123.470	903.009	959.303	845.554	502.966	392.102	272.844	0	0	0	0	0
(Amortization provision)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
B.II. TOTAL TANGIBLE FIXED ASSETS	52.997.373	51.799.654	52.891.540	52.735.741	53.196.711	48.275.107	48.337.630	27.142.205	12.739.014	13.614.727	13.614.727	13.614.727
including: leased tangible assets	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
B.III. Land and buildings	9.040	9.040	9.040	9.040	9.040	9.040	9.040	7.000	7.000	7.000	7.000	7.000
B.III.2. Plant and machinery	46.055.842	47.443.613	48.689.126	49.232.884	49.935.395	46.831.932	47.205.333	26.938.272	12.663.395	13.537.188	13.537.188	13.537.188
B.III.3. Indust. and commercial equipment	27.431	23.126	0	0	0	0	0	2.548	0	0	0	0
B.III.4. Other assets	6.905.060	4.156.906	3.946.588	3.415.903	3.134.419	1.316.278	1.123.257	194.285	68.619	70.539	70.539	70.539
B.III.5. Additions in progress and advances (depreciation provision)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
B.III.6. Total FINANCIAL FIXED ASSETS including: short term	133.547	124.996	90.218	89.131	0	0	0	0	0	0	0	0
B.III.7. Total equity investments	76.541	23.409	0	0	n.a.							
B.III.1.a. Subsidiary companies	0	0	0	0	0	0	0	0	0	0	0	0
B.III.1.b. Associated companies	0	0	0	0	0	0	0	0	0	0	0	0
B.III.1.c. Parent companies	0	0	0	0	0	0	0	0	0	0	0	0
B.III.1.d. Companies under parent companies	0	0	0	0	0	0	0	0	0	0	0	0
B.III.1.d.bis. Other companies	0	0	0	0	0	0	0	0	0	0	0	0
B.III.2. Total Receivables	133.547	124.996	90.218	89.131	0	0	0	0	0	0	0	0
B.III.2.a. Due from subsidiary comp.	0	0	0	0	0	0	0	0	0	0	0	0
B.III.2.a. Due from subs. comm. - beyond 12	0	0	0	0	0	0	0	0	0	0	0	0
B.III.2.b. Due from assoc. comm. - beyond 12	0	0	0	0	0	0	0	0	0	0	0	0
B.III.2.c. Due from parent comm. - beyond 12	0	0	0	0	0	0	0	0	0	0	0	0
B.III.2.d. Due from comp. under parent companies	0	0	0	0	0	0	0	0	0	0	0	0
B.III.2.d.bis. Due from other comp. - beyond 12	76.541	23.409	0	0	0	0	0	0	0	0	0	0
B.III.2.d.bis Due from other comp. - beyond 12	57.006	101.587	90.218	89.131	0	0	0	0	0	0	0	0
B.III. FINANCIAL RECEIV. WITHIN 12 MONTHS	76.541	23.409	0	0	0	0	0	0	0	0	0	0
B.III. FINANCIAL RECEIV. BEYOND 12 MONTHS	57.006	101.587	90.218	89.131	0	0	0	0	0	0	0	0
B.III.3. Other securities	0	0	0	0	0	0	0	0	0	0	0	0
B.III.3.bis. Own shares	0	0	0	0	0	0	0	0	0	0	0	0
B.III.4. Derivatives	0	0	0	0	0	0	0	0	0	0	0	0
Own shares: net value	0	0	0	0	0	0	0	0	0	0	0	0

	31/12/2020	31/12/2021	31/12/2018	31/12/2017	31/12/2016	31/12/2015	31/12/2021	31/12/2013	31/12/2021	31/12/2021
	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR
C. TOTAL CURRENT ASSETS	48.717.841	50.745.670	32.032.672	30.649.077	31.423.558	24.780.253	20.001.721	19.412.210	16.928.420	15.283.583
C.I. TOTAL INVENTORIES	825.009	1.556.656	28.980	1.084.914	367.388	684.132	159.342	123.984	69.368	0
C.I.1. Raw and consumable materials	0	0	0	0	0	0	0	0	0	0
C.I.2. Work in progress and semifinished products	825.009	1.556.656	28.980	1.084.914	367.388	684.132	159.342	123.984	69.368	0
C.I.3. Contract work in progress	0	0	0	0	0	0	0	0	0	0
C.I.4. Finished products and goods	0	0	0	0	0	0	0	0	0	0
C.I.5. Advances	0	0	0	0	0	0	0	0	0	0
Tangible fixed assets to be sold	0	0	0	0	0	n.a.	n.a.	n.a.	n.a.	n.a.
C.II. TOTAL RECEIVABLES	34.525.118	43.741.994	26.365.252	23.931.938	22.881.400	19.678.942	15.331.785	12.807.538	11.517.250	11.412.186
C.II.1. Trade accounts	3.187.020	2.354.219	3.098.819	2.454.976	3.417.110	16.331.781	13.829.887	10.900.886	10.744.605	11.180.316
C.II.1. Trade accounts - beyond 12 months	0	0	0	0	0	0	0	0	0	0
C.II.2. Due from subs. comp.	0	0	0	0	0	0	0	0	0	0
C.II.2. Due from subs. comp. - beyond 12 months	0	0	0	0	0	0	0	0	0	0
C.II.3. Due from assoc. comp.	0	0	0	0	0	0	0	0	0	0
C.II.3. Due from assoc. comp. - beyond 12 months	0	0	0	0	0	0	0	0	0	0
C.II.4. Due from parent comp.	29.632.814	39.737.802	22.000.563	19.001.090	15.576.505	0	0	0	0	0
C.II.4. Due from parent comp. - beyond 12 months	0	0	0	0	0	0	0	0	0	0
C.II.5. Due from comp. under parent companies	0	0	90.412	170.411	0	n.a.	n.a.	n.a.	n.a.	n.a.
C.II.5. Due from comp. under parent companies	0	0	0	0	0	n.a.	n.a.	n.a.	n.a.	n.a.
C.II.5.bis. Tax receivables	80.025	261.758	237.779	1.398.220	3.147.218	2.680.029	336.377	93.112	636.414	189.441
C.II.5.bis. Tax receiv. - beyond 12 months	121.693	0	0	0	0	0	419.315	93.195	93.195	0
C.II.5.ter. Tax receiv. for prepaid taxes	1.159.127	1.134.218	836.366	727.048	558.633	0	0	0	0	0
C.II.5.ter. Tax receiv. for prepaid taxes - beyond	0	0	0	0	0	390.248	256.023	138.427	0	0
C.II.5.ouater. Receiv. due from others	344.439	253.997	69.798	176.157	176.934	268.884	490.183	1.581.918	43.036	42.429
C.II.5.ouater. Receiv. due from others - beyond 12	0	0	31.515	4.036	5.000	8.000	0	0	0	0
C.II. RECEIV. DUE WITHIN 12 MONTHS	34.403.425	43.741.994	26.333.737	23.927.902	22.876.400	19.280.694	14.656.447	12.575.916	11.424.055	11.412.186
Amounts due for advance taxation	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C.II. RECEIV. DUE BEYOND 12 MONTHS	121.693	0	31.515	4.036	5.000	398.248	675.338	231.622	93.195	0
C.III. TOTAL FINANCIAL ASSETS	4.000	3.000	3.000	3.000	3.000	4.000	11.000	0	0	0
C.III.1. Invest. in subs. comp.	0	0	0	0	0	0	0	0	0	0
C.III.2. Invest. in assoc. comp.	0	0	0	0	0	0	0	0	0	0
C.III.3. Invest. in parent comp.	0	0	0	0	0	0	0	0	0	0
C.III.3.bis. Invest. in comp. under parent companies control	0	0	0	0	0	n.a.	n.a.	n.a.	n.a.	n.a.
C.III.4. Other investments	4.000	3.000	3.000	3.000	3.000	3.000	0	0	0	0
C.III.4.bis. Own shares	0	0	0	0	0	1.000	11.000	0	0	0
Own shares: par value	0	0	0	0	0	n.a.	n.a.	n.a.	n.a.	n.a.
C.III.5. Derivatives	0	0	0	0	0	n.a.	n.a.	n.a.	n.a.	n.a.
C.III.6. Other securities	0	0	0	0	0	0	0	0	0	0
C.III.7. Financial instruments for cash noolinge	0	0	0	0	0	n.a.	n.a.	n.a.	n.a.	n.a.
C.IV. TOTAL LIQUID FUNDS	13.363.714	6.845.020	5.635.440	5.629.225	8.171.770	4.413.179	4.499.594	6.480.688	5.341.802	3.871.397
C.IV.1. Bank and postal deposits	13.361.910	6.842.006	5.635.211	5.628.050	8.170.322	4.412.544	4.499.127	6.480.393	5.341.454	3.870.066
C.IV.2. Checks	0	0	0	0	0	0	0	0	0	0
C.IV.3. Cash and cash equivalents	1.804	3.014	229	1.175	1.448	635	467	295	348	1.331
D. TOTAL ACCRUED INCOME AND PREPAID EXPENSES	2.424.292	2.866.196	1.262.650	1.806.891	2.834.680	887.283	905.305	89.607	21.829	129.197
Accrued income and prepaid exp.	n.a.	n.a.	n.a.	n.a.	n.a.	0	0	0	0	0
TOTAL ASSETS	107.018.952	107.286.218	88.418.516	88.641.569	91.662.835	78.598.300	75.372.155	50.933.517	30.847.616	30.296.922

	31/12/2020	31/12/2021	31/12/2018	31/12/2017	31/12/2016	31/12/2015	31/12/201	31/12/2013	31/12/201	31/12/201
	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR
Payables										
D. TOTAL PAYABLES	27.266.678	27.467.728	15.931.822	16.666.400	20.779.069	13.569.054	11.624.911	12.807.532	10.694.128	10.723.408
D.1. Bonds	0	0	0	0	0	0	0	0	0	0
D.1. Bonds beyond 12 months	0	0	0	0	0	0	0	0	0	0
D.2. Convertible bonds	0	0	0	0	0	0	0	0	0	0
D.2. Convertible bonds - beyond 12 months	0	0	0	0	0	0	0	0	0	0
D.3. Due to shareholders for loans	0	0	0	0	0	0	0	0	0	0
D.3. Due to shareholders for loans - beyond 12	0	0	0	0	0	0	0	0	0	0
D.4. Due to banks	0	0	2.247	1.859	0	0	0	0	0	2
D.4. Due to banks - beyond 12 months	0	0	0	0	0	0	0	0	0	0
D.5. Due to other lenders	0	0	701.496	2.150.633	865.483	0	0	0	0	0
D.5. Due to other lenders - beyond 12 months	422.265	600.283	600.284	691.165	676.742	0	0	0	0	0
D.6. Advances	1.292.999	639.107	113.183	151.824	541.364	491.594	44.440	74.595	144.085	106.250
D.6. Advances - beyond 12 months	0	0	0	0	0	0	0	0	0	0
D.7. Due to suppliers	15.900.598	15.288.662	11.635.806	11.018.255	13.775.646	11.785.096	9.842.533	11.361.722	10.065.642	10.187.484
D.7. Due to suppliers - beyond 12 months	0	0	0	0	1.225.137	0	0	0	0	0
D.8. Negotiable instruments	0	0	0	0	0	0	0	0	0	0
D.8. Negotiable instruments - beyond 12 months	0	0	0	0	0	0	0	0	0	0
D.9. Due to subsidiary companies	0	1.034.834	0	0	0	0	0	0	0	0
D.9. Due to subsidiary companies - beyond 12	0	0	0	0	0	0	0	0	0	0
D.10. Due to associated companies	0	0	0	0	0	0	0	0	0	0
D.10. Due to associated companies - beyond 12	0	0	0	0	0	0	0	0	0	0
D.11. Due to parent companies	1.034.834	0	1.162.479	1.156.078	272.639	0	0	0	0	0
D.11. Due to parent companies beyond 12 months	0	0	0	0	1.106.985	0	0	0	0	0
D.11 bis. Due to comp. under parent companies	0	0	0	0	0	n.a.	n.a.	n.a.	n.a.	n.a.
D.11 bis. Due to comp. under parent companies	0	0	0	0	0	n.a.	n.a.	n.a.	n.a.	n.a.
D.12. Tax payable	3.635.334	5.329.102	235.114	200.093	183.424	172.422	197.955	479.869	167.337	153.098
D.12. Tax payable beyond 12 months	0	0	0	0	0	0	0	0	0	0
D.13. Due to social security institutions	1.824.181	1.722.629	224.531	232.547	222.831	167.893	158.553	206.374	150.883	133.257
D.13. Due to social security institutions - beyond	0	0	0	0	0	0	0	0	0	0
D.14. Other payables	3.156.467	2.853.111	1.256.682	1.063.946	1.908.818	952.049	1.066.310	684.972	166.181	143.317
D.14. Other payables beyond 12 months	0	0	0	0	0	0	315.120	0	0	0
D. Payables due within 12 months	26.844.413	26.867.445	15.331.538	15.975.235	17.770.205	13.569.054	11.309.791	12.807.532	10.694.128	10.723.408
D. Payables due beyond 12 months	422.265	600.283	600.284	691.165	3.008.864	0	315.120	0	0	0
Total payables during period	26.844.413	26.867.445	15.331.538	15.975.235	17.770.205	13.569.054	11.309.791	12.807.532	10.694.128	10.723.408
Total payables after period	422.265	600.283	600.284	691.165	3.008.864	0	315.120	0	0	0
E. TOTAL ACCRUED EXPENSES AND DEFERRED	3.432.346	3.543.101	3.318.131	3.329.208	2.562.551	1.895.358	743.558	669.242	508.600	484.972
Fees on loans	n.a.	n.a.	n.a.	n.a.	n.a.	0	0	0	0	0
TOTAL LIABILITIES AND SHAREHOLDERS'	107.018.952	107.286.218	88.418.516	88.641.569	91.662.835	78.598.300	75.372.155	50.933.517	30.847.616	30.296.922
TOTAL MEMORANDUM ACCOUNTS	0	0	0	0	0	121.250	116.250	100.000	100.000	100.000
TOTAL WARRANTIES SUPPLIED	0	0	0	0	0	n.a.	n.a.	n.a.	n.a.	n.a.

	Profit and loss account											
	31/12/2020	31/12/2021	31/12/2018	31/12/2017	31/12/2016	31/12/2015	31/12/2014	31/12/2013	31/12/2012	31/12/2011	31/12/2010	31/12/2009
	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR
A. TOTAL VALUE OF PRODUCTION	60,583,006	60,821,768	27,758,119	29,102,256	28,892,725	27,165,059	21,618,474	18,861,222	15,835,751	17,328,559	17,268,339	
A.1. Revenues from sales and services	59,092,773	60,196,814	28,196,014	27,844,332	28,805,823	26,111,399	21,147,976	18,439,440	15,444,611	17,268,339		
A.2. Changes in inventories	729,821	155,656	-1,055,934	717,526	-316,745	524,791	0	0	0	0	0	
A.3. Changes in contract work in progress	729,821	155,656	-1,055,934	717,526	-316,745	524,791	0	0	0	0	0	
A.2.+A.3. Total changes	0	0	0	0	0	0	0	0	0	0	0	
A.4. Additions to fixed assets	760,412	469,298	618,039	540,398	403,647	528,869	470,498	421,782	391,140	60,220	0	
A.5. Other revenue	289,361	155,731	145,531	156,282	20,000	155,156	161,377	157,746	0	400	0	
B. TOTAL PRODUCTION COSTS	60,433,130	60,775,393	27,093,024	28,504,066	28,358,356	27,083,031	20,878,407	17,528,976	15,134,742	16,881,445		
B.6. Raw. consum. mat. and goods for resale	980,709	1,448,289	1,563,685	1,121,960	3,931,116	1,543,251	1,802,392	1,907,311	775,451	2,378,583		
B.7. Services	16,025,125	17,923,301	11,948,176	14,051,697	11,529,399	13,452,830	8,472,781	7,239,302	8,363,293	8,365,191		
B.8. Use of third parties assets	1,961,684	1,912,321	928,810	1,088,259	1,399,639	1,309,499	1,379,136	1,492,886	1,411,699	1,393,213		
B.9. Total personnel costs	26,411,866	26,052,400	4,893,578	4,756,705	4,711,264	4,561,741	4,471,203	4,292,577	3,283,502	3,329,736		
B.9.a. Wages and salaries	19,153,456	18,835,154	3,584,623	3,449,504	3,420,848	3,320,553	3,257,046	3,098,925	2,333,797	2,386,253		
B.9.b. Social security charges	5,848,295	5,802,654	1,097,994	1,070,740	1,048,302	1,023,452	994,955	985,046	789,279	781,971		
B.9.c. Severance indemnities	1,388,413	1,396,465	161,368	189,268	219,810	178,547	186,806	183,868	138,871	140,871		
B.9.d. Pensions and similar obligations	0	0	46,283	43,198	18,484	30,667	28,156	24,738	21,555	18,589		
B.9.e. Other costs	21,702	18,127	3,310	3,995	3,820	3,822	4,240	0	2,052	0		
B.9.f. Severance indemnity + Pension + Other	1,410,115	1,414,592	210,961	236,461	242,114	217,736	219,202	208,606	160,426	161,512		
B.10. Total depreciation, amortization and	8,995,966	8,597,068	7,510,119	7,084,023	6,620,207	5,805,422	4,261,311	2,335,403	1,144,246	1,110,892		
B.10.a. Amort. of intangible fixed assets	1,274,607	1,201,457	1,482,542	1,667,588	1,935,884	1,751,853	1,408,607	387,773	112,601	116,629		
B.10.b. Dep. of tangible fixed assets	7,721,359	7,169,323	6,027,577	5,416,435	4,684,323	4,053,569	2,852,704	1,947,630	1,031,645	994,263		
B.10.c. Writedown of fixed assets	0	0	0	0	0	0	0	0	0	0		
B.10.a+b+c. Depreciation, amortization and	8,995,966	8,370,780	7,510,119	7,084,023	6,620,207	5,805,422	4,261,311	2,335,403	1,144,246	1,110,892		
B.10.d. Writedown of receivables	0	226,288	0	0	0	0	0	0	0	0		
B.11. Change in inventory of raw and consumable	0	28,980	0	0	0	0	0	0	0	0		
B.12. Provisions for risks and charges	0	0	0	0	0	0	66,596	0	0	0		
B.13. Other provisions	0	0	0	0	0	0	0	0	0	0		
B.14. Other operating expenses	6,057,780	4,813,034	248,656	401,422	166,731	410,288	424,988	261,497	156,551	303,830		
OPERATING MARGIN	149,876	46,375	665,095	598,190	534,369	82,028	740,067	1,332,246	701,009	447,114		
Added Value	35,557,708	34,695,843	13,068,792	12,438,918	11,865,840	10,449,191	9,539,177	7,960,226	5,128,757	4,887,742		
C. TOTAL FINANCIAL INCOME AND CHARGES	-60,830	3,018	34,903	-38,017	90,394	-2,067	73	-45,371	7,182	8,810		
C.15. Total income from equity investments	0	0	0	0	0	0	0	0	0	0		
of which: from subsidiaries, associated, parent ctes	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.		
of which: from parent companies	0	0	0	0	0	0	0	0	0	0		
of which: from companies under parent companies	0	0	0	0	0	0	0	0	0	0		
C.16. Total other financial income	8,035	75,164	47,329	6,536	106,028	334	881	1,358	7,230	9,321		
C.16.a. From financial receivables	0	0	0	0	0	0	0	0	0	0		
of which: from subsidiaries, associated, parent	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.		
of which: from companies under parent	0	0	0	0	0	0	0	0	0	0		
C.16.b. From securities held as fixed assets	0	0	0	0	0	0	0	0	0	0		
C.16.c. From securities held as current assets	0	0	0	0	0	0	0	0	0	0		
C.16.b+c. From securities	0	0	0	0	0	0	0	0	0	0		
C.16.d. Income other than the above	8,035	75,164	47,329	6,536	106,028	334	881	1,358	7,230	9,321		
of which: from subsidiaries, associated, parent	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.		
of which: from companies under parent	0	0	0	0	0	0	0	0	0	0		
C.17. Total financial charges	68,731	72,163	12,426	44,553	15,634	2,401	808	46,729	48	512		
of which: from financial receivables subs and	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.		
of which: from companies under parent companies	0	0	0	0	0	0	0	0	0	0		
C.17.bis Profit and Loss on Foreign Exchange	-134	17	0	0	0	0	0	0	0	0		

	31/12/2020	31/12/2021	31/12/2018	31/12/2017	31/12/2016	31/12/2015	31/12/2021	31/12/2013	31/12/2021	31/12/2021
	EUR									
D. TOTAL FINANCIAL ASSETS ADJUSTMENTS										
D.18. Total Revaluations	0	0	0	0	0	0	0	0	0	0
D.18.a. Reval. of equity investments	0	0	0	0	0	0	0	0	0	0
D.18.b. Reval. of other financial assets	0	0	0	0	0	0	0	0	0	0
D.18.c. Reval. of securities	0	0	0	0	0	0	0	0	0	0
D.18.d. Reval. of derivatives	0	0	0	0	0	0	0	0	0	0
Reval. of financial instruments for cash pooling	0	0	0	0	0	0	n.a.	n.a.	n.a.	n.a.
D.19. Total Writedowns	0	0	0	0	0	0	0	0	0	0
D.19.a. Writedowns of equity invest.	0	0	0	0	0	0	0	0	0	0
D.19.b. Writedowns of other fin. Ass.	0	0	0	0	0	0	0	0	0	0
D.19.c. Writedowns of securities	0	0	0	0	0	0	0	0	0	0
D.19.d. Writedowns of derivatives	0	0	0	0	0	0	0	0	0	0
Writedowns of financial instruments for cash pooling	0	0	0	0	0	0	n.a.	n.a.	n.a.	n.a.
TOTAL EXTRAORDINARY REVENUES AND CHARGES	0	0	0	0	0	307.746	0	-511.340	31.232	1
Extraordinary revenues	0	0	0	0	0	309.351	0	1	93.195	1
of which capital gains	0	0	0	0	0	309.351	0	0	0	0
Extraordinary charges	0	0	0	0	0	1.605	0	511.341	61.963	0
of which capital losses	0	0	0	0	0	0	0	0	0	0
of which taxes previous period	0	0	0	0	0	489	0	0	0	0
PROFIT/LOSS BEFORE TAXATION	89.046	49.393	699.998	560.173	624.763	387.707	740.140	775.535	739.423	455.925
20. Total current, deferred and prepaid income taxes	27.817	-39.146	161.083	251.023	167.563	202.787	400.231	566.737	308.594	313.513
Current taxes	52.486	66.902	270.287	391.086	335.949	337.012	517.827	617.487	313.467	318.989
Taxation related to previous years	240	-59.076	115	28.351	0	n.a.	n.a.	n.a.	n.a.	n.a.
Prepaid and deferred taxes	-24.909	-46.972	-109.319	-168.414	-168.386	-134.225	-117.596	-50.750	-4.873	-5.476
deferred taxation (+/-)	n.a.									
advance taxation (+/-)	n.a.	n.a.	n.a.	n.a.	n.a.	-134.225	-117.596	-50.750	-4.873	n.a.
Income (expenses) for adherence to fiscal transparency regime	0	0	0	0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
21. PROFIT (LOSS)	61.229	88.539	538.915	309.150	457.200	184.920	339.909	208.798	430.829	142.412
PROFIT (LOSS) THIRD PARTIES	n.a.									
PROFIT (LOSS) GROUP	61.229	88.539	538.915	309.150	457.200	184.920	339.909	208.798	430.829	142.412

