# BUSINESS PLAN PRESENTATION

A new national leader for the integrated management of the infrastructure lifecycle is born

Engineering, sustainable development, mobility systems, new travel technologies

Rome, 21 January 2021





# Rapidly evolving context

Need and opportunity for a radical renewal of the road infrastructure network





Growing vulnerability of the Italian territory: ~7.000 municipalities in areas at risk of landslides/land instability

Average age of ASPI network ~50 years



**EUR 550 billion** of estimated **smart road** investments worldwide by 2025 (100 in green-field)

**30% of the network "connected"** by 2030: sensors and 5G technologies

### Rapidly evolving context



>40% of the population inclined to increase **private car** use for medium-long distance travel<sup>1</sup>, also as a result of the pandemic. Change in mobility habits also due to smart working

Paradigm shift in transport, on all fronts (expedited by the implications of the Covid-19 crisis)



~3x increase in shared vehicles between 2018 and 2030 (~9% average annual growth)

~10% of the vehicle fleet to be electric by 2030 (today <1%), ~4 million electric vehicles expected<sup>2</sup>



**eCommerce** growth: ~18% incidence on global purchases (vs. ~5% as of 2018)

**50-60%** L3-L4<sup>3</sup> self-driving vehicles by 2030



Maintenance: +60% on average during the plan period (vs. previous cycle)<sup>1</sup>

Investment
commitments (new
works and existing
asset upgrades): +110%
on average during the
plan period (vs.
previous cycle)<sup>1</sup>

### New vision of the ASPI "Group"



Integrated management of the mobility infrastructure lifecycle (research, engineering, construction, management, maintenance)

Innovative services for travellers, also besides the motorway network

Innovation and research applied to engineering to become a "smart" infrastructure

Sustainability at the heart of the value creation process

Excellent player also active in the non-captive market

# Transformation plan



"Next" plan for an allaround business transformation

Full digitisation of the operating model (a datadriven, secure, fast, transparent ASPI), with an investment of EUR 170-200 million in 2021-2023

A structural revolution in network care, management and maintenance systems in less than 2 years



Turnaround of the surveillance activities of the assets, entrusted to a consortium of external companies of international importance<sup>1</sup>



In one year

19,000+
inspections
(bridges, viaducts,
flyovers, tunnels);
launch of the
programme for the
digital mapping of
the network
(ARGO)



Major maintenance effort: EUR 400m in 2019, EUR 650m in 2020 vs. an average of about EUR 300m in 2017-18



Renewal of 80%+
of operational
managerial
positions and
strengthening of
organizational
safeguards (e.g.
"Quality")

A process of profound renewal of the company

New nationally recognised standards for medium to long-term infrastructure management

A necessary reaction after the tragedy in Genoa

# EUR 21.5 billion delivery plan

EUR 14.5 billion in CapEX and

EUR 7 billion in maintenance by 20381



Capital expenditure EUR billion, 2020-2038



of which EUR 4.2bn Liguria<sup>2</sup> for new works (e.g. Bypass) **Emilia** of which EUR 2.4bn 3.0 of which EUR 2 for new works Romagna<sup>2</sup> 2.7 of which EUR 2.1bn for new works **Tuscany** of which EUR 0.5bn for new works Lombardy of which EUR Veneto<sup>2</sup> <0.1bn for new works Apulia, Marche, 2.1 of which EUR 0.2bn for new works Lazio, Abruzzo, Campania<sup>2</sup> of which EUR 9.4bn

Maintenance EUR billion, 2020-2038



1.2

8.0

1.0

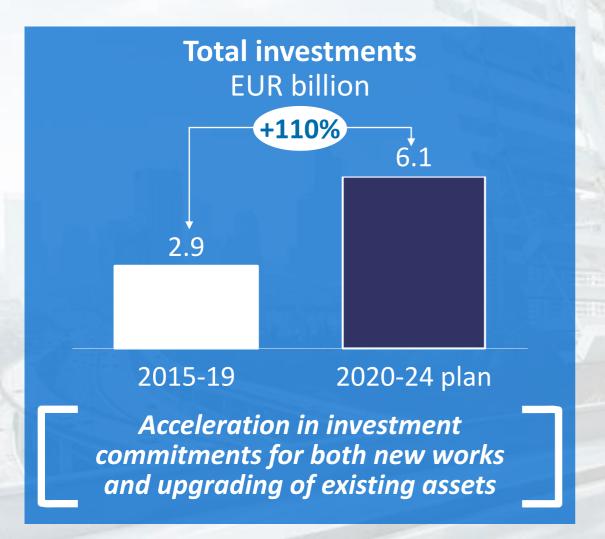
0.9

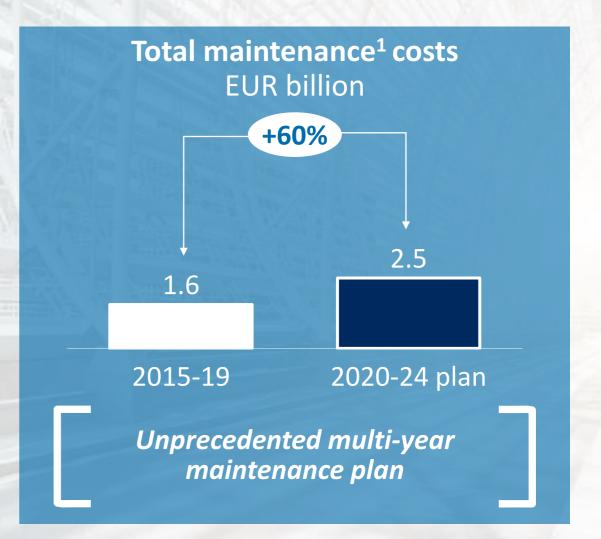
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2.5

6.8

Ambitious timeline, strong acceleration in the current cycle (2020-2024)





Objective: a radically modernised motorway infrastructure

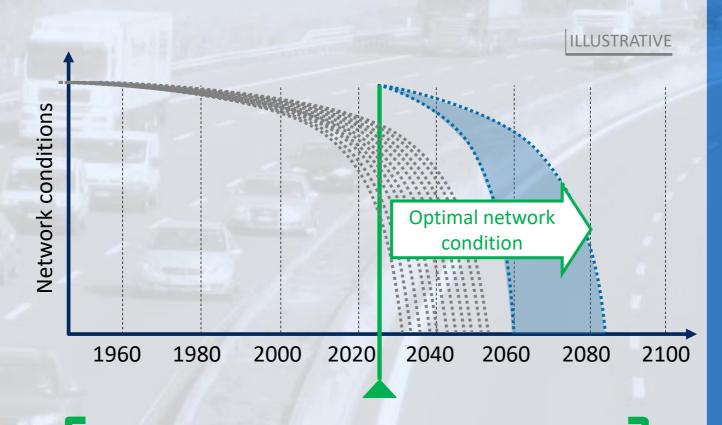
~50%

of bridges and viaducts built **before 1970** (and ~93% before 1990)

~35%

of km of tunnels built **before 1970** 

(and ~78% before 1990)



Investment programme made possible by the extensive asset "assessment" effort started in 2019

100%

of assets subject to "assessment" and intervention



Bridges and viaducts



**Tunnels** 



Barriers (noise barriers)



**Plants** 

Great economic benefits for the "Italian System"

Annual CAPEX over the '20-'24 period, EUR billion

**Ferrovie** 9.2 dello Stato<sup>1</sup> TIM 3.0 ASPI<sup>2</sup> 1.5 Terna 1.2 Wind-Tre 1.2 Italgas 0.6

## ~7k - 10k jobs in the country

created over the period of the Plan

## **ASPI Group: new vision**

#### Integrated approach to infrastructure management

Chief Executive Officer

Depts.

Human Capital, Planning & **Business CFO** Procurement Control development Orga & HSE Risk IT & Digital **Ext. Relations** Quality Legal **Transformation** & Marketing Management

Technology (R&D)

autostrade Tech

**Engineering and Realization** 



Construction and Services



**Operations** 

Services for travellers

("Free to Xperience")

**Business Line** 



Consolidate leadership in technological solutions and innovative systems



Accelerate the realization of key projects for the evolution of the network



Create a major player in the construction industry



Raise performance and reliability standards of assets



Offer innovative services to travellers

Service to Business Line, control and quality assurance

Operational management of the businesses, including the 5 participated concessions

Full integration of the infrastructure lifecycle and monitoring of relations with travellers

### **New vision**

#### The new team



**Roberto Tomasi** CEO-General Manager



**Gian Luca Orefice** 



**Alberto Milvio** 



Giulio Bozzini



**Amedeo Gagliardi** 



Francesco Del Greco IT & Digital



Nicola Allocca Risk Mamt, Compliance &



Stefano Porro



Alberto Selleri

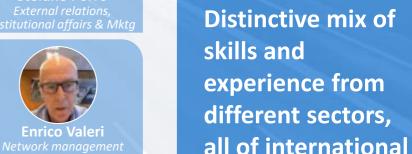


Fernando De Maria





**Giorgio Moroni** 





**Luca Fontana** 





**Major investment** 

transparency and

in engineering,

regulatory

compliance/

digital skills

relevance



Leading company in Italy in the engineering of transport infrastructures. It strengthens the skills of the entire value chain (planning, design, works management and site safety coordination).



#### **New vision**



Strong control over skills

Creation of a distinctive internal Technical Authority structure



Innovative working methods

Multi-disciplinary teams and agile working methods to speed up planning times



**Delivery** capacity

Strong recruiting plan, and large capacity of external supply contracts, already secured



**System Player** 

Potential for the non-captive market, once plan priorities have been met (medium term)

Strategic aggregation of local skills



(By 2024, the first transport infrastructure engineering company in Italy)

Italferr<sup>1</sup>

700

Rina Consulting

700

Jacobs Italia

230

Proger

170

# (New) pavimental (

An integrated provider of construction and maintenance services, oriented towards extra-captive growth in the Italian market by capitalizing on the skills developed with ASPI



#### **New vision**



**Integration** 

Central role in the realization of into the Group ASPI's industrial plan, amongst major works and maintenance activities



**System** player

Opportunity to capitalize on the skills developed to support the ASPI plan (EUR 14.5 billion in new works and EUR 7 billion in maintenance) to elevate the role of new Pavimental in the Italian infrastructure market



Potential for significant growth in revenues, generating a volume of business in line with that generated in Italy by the main players in the domestic market



Turnover in 2024<sup>1</sup> (mainly in Italy) to make new Pavimental a leader in the domestic market (already among the top 5 construction companies in the country)



Recruitment plan over the next four years to make major investments

1 Plan objective

#### **New vision**



**Leading technological** operator in the market, focused on innovative services both in urban and extra-urban areas, while remaining a research centre of excellence for the ASPI group.





Intelligent Transportation Systems (ITS) sector: IT systems for toll collection and traffic monitoring

First Italian player: solutions developed for ASPI and other Italian operators

At EU level, among the top 3 operators in terms of turnover at the end of the Plan<sup>1</sup>



Main objective: development of "smart roads" technologies and urban mobility

- ARGO<sup>2</sup>, asset management platform for motorway network (launched)
- New, efficient and "user-friendly" Tollgates 2.0: ~1,5k by 2024
- Active monitoring systems<sup>3</sup>: ~4k cameras along the network
- Vehicle-to-infrastructure communication<sup>4</sup> protocols



Target turnover for 2024 (doubling current values to become a leading player at European level)



Workforce in 2024 vs. 2020

# Free to **Xperience**

**Newly established** company responsible for developing advanced services for travellers, offering solutions to improve environmental sustainability and travel experience, also besides the motorway.



#### **New vision**



Offering mobility services

Aiming to become a leader in traveller services for sustainable mobility (e.g. car pooling, car sharing, park-and-ride schemes: on motorways, but also in urban areas)



Travel services

First step: creating Italy's most extensive sustainability network of charging stations for electric vehicles on the motorway network



Travel experience services

Handling toll cash-back services that take into account delays suffered by travellers

Travel planning through integrated management of available data

Improving the service areas experience



**System** player

Scope of work: ASPI, other mobility operators, institutional stakeholders (e.g. metropolitan cities)



Equipped with high-voltage charging stations



With innovative operators in the field of sustainable mobility

# New vision

Environmental sustainability at the heart of the value creation process



"Green" infrastructure

Installation of new photovoltaic panels (+45GWh/y of "green" energy)

Charging stations for electric vehicles (67 service areas already approved by MIT)

Reforestation of managed areas



Alignment of implementation and maintenance standards for resilience needs related to climate change

Specific technical "k" factors on sustainability for procurement of services and materials



Broad portfolio of initiatives already in place (e.g. installation of 30+k low energy, high performance LEDs in tunnels)

## New vision



Focus on the environmental sustainability of the travel

#### The new network of charging stations for electric vehicles (phase 1)



- 1 Lario Est
- 2 Brughiera Ovest
- 3 Villoresi Est/Ovest
- 4 S. Donato Est
- 5 Monferrato Est/Ovest
- 6 S. Zenone Est/Ovest
- 7 Stura Est/Ovest
- 8 Aurelia Sud
- 9 S. Ilario Nord/Sud
- 10 Arda Est/Ovest
- 11 Secchia Est/Ovest
- 12 Peretola Nord/Sud
- 13 Firenze Nord
- 15 Arno Est
- 14 Arno Ovest

- 16 Fabro Est
- 17 Giove Ovest
  - 18 Tirreno Est/Ovest
  - 19 Salaria Est
    - 20 Novate Nord
- 21 Lambro Sud
  - 22 La Macchia Est/Ovest
    - 23 S. Nicola Est/Ovest
    - 24 Cittadella
    - 25 Brianza Nord/Sud
    - 26 Valtrompia Nord/Sud
    - 27 Piave Est/Ovest

    - 28 Adige Ovest
    - 29 Po Est
    - 30 La Pioppa Est/Ovest

- 31 Sillaro Est/Ovest
  - 32 Badia Nuova Ovest
  - 33 Aglio Est
  - 34 Montefeltro Est/Ovest
  - 35 Esino Est
  - 36 Conero Ovest
  - 37 Flaminia Est

  - 38 Mascherone Ovest
  - 39 Torre Cerrano Est/Ovest
  - 40 Torre Fantine Est/Ovest
  - 41 Le Saline Est/Ovest
  - 42 Ofanto Nord/Sud
  - 43 Murge Est/Ovest
  - 44 Irpinia Nord/Sud

Development of the entire network 67

service areas already identified and approved by the MIT

#### First 2 charging stations

scheduled to be completed in February 2021 ("Secchia Ovest and Flaminia Est")



recharging points for each station

#### **Ultra-fast multiclient recharge**

300+kw

the power of the charging stations



the time for a full charge

about **23,500** 

electric cars in circulation todav



**Payment** 

integrated payment system also available for noncustomers

## New vision



"Green" infrastructure



**CO2** emissions

-16,000

tonnes per year

**Green energy produced** 

-8,400 tonnes of oil equivalent (TOE)



+45gwh/y

equal to the consumption of all 240 stations and 204 service areas



EUR 25<sub>m</sub>

investment

25%

of the total energy required by the network (175 GWh/y)

#### PV systems installed to date

ground-mounted at Directorates General 8

165 at Section Departments

in service areas 90

> on peripheral buildings (garages, parking spaces, etc.)

#### **Energy produced**

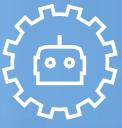


**12**GWh/y

7%

of the total energy required by the network (175 GWh/y)

# Transformation plan



Focus on innovation and applied research



Initiatives for the **digitisation of processes and SERVICES**, transformation of the network into a "smart" infrastructure through the most advanced technologies



Initiatives involving **Human Resources**, in particular induction and on-boarding programmes for Autostrade's new resources.



Mapping of processes, responsibilities, risks and procedures to create a unified system aimed at ensuring full **operational excellence** 



**Partnerships and collaborations** with leading **Italian universities** to offer the very best training for all group employees



Strengthening and sharing **ASPI Safety Academy** initiatives within the HSE (Health, Safety & Environment) framework



Diffusion of the **transformation at the communication and information level** through tools and channels, both internal and throughout the territory

# Transformation plan



**Internal efficiency** 

Infrastructure management and safety

**Customer experience** 

## **EUR 200m for digital services**

"Traveller experience": some examples of projects launched



# **Motorway and traffic management**



Predictive models of traffic flows for planning road works so as to minimise the impact on traffic (estimation of any inconvenience caused and calculation of tariff discounts)

Go-live: mid-2021



Real-time monitoring and alerting systems in the event of motorway disruption (e.g. accidents) or traffic congestions for a:

- Proactive and dynamic management of lanes and speed limits
- Preventive deployment of viability/rescue teams

Go-live: end of 2021



# Travel experience



New services for travellers: recommended times of departure, advance toll calculation, restaurants, attractions and points of interest along the journey

Go-live: mid-2021



Extra services in the Service Areas (e.g. parking, "skip the line" table reservation) and on the motorway network (e.g. advance toll payment)

Go-live: mid-2021



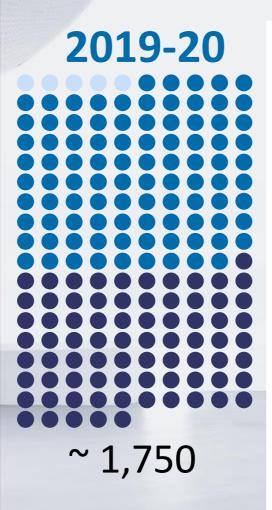
Digital communication channel between the customer and Autostrade for emergencies, complaints, assistance and automatic processing of requests via a Virtual Agent

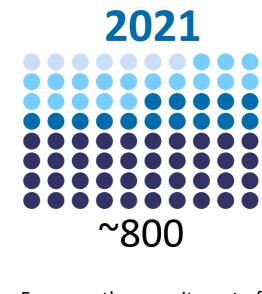
Go-live: end of 2021

#### **Transformation** plan

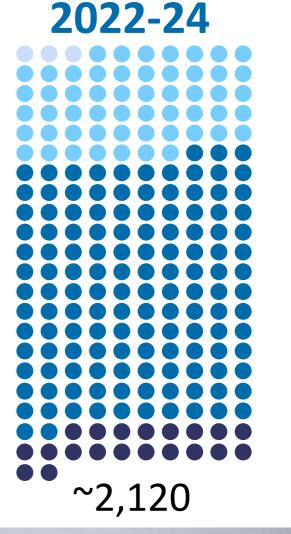


# Recruitment plan, creating 2,900 jobs





Focus on the recruitment of employees in the STEM<sup>1</sup> fields to meet the needs of the technical areas (e.g. engineering), and the upskilling requirements needed for the Digital Transformation; promotion of gender diversity as a strategic development action



# plan



"Open" approach of long-term partnerships for the development of human resources

# Transformation The network we are building







Partnerships with universities, participation in Career Days and creation of curricular internships









Collaboration with leading Italian universities to promote staff training, with courses totalling over 100,000 hours per year for over 4,000 employees:

- Autostrade Academy
- Autostrade Business School
- Autostrade Talent Program

Involvement of university students in the company's strategic activities.

Organisation of events to present the company, also through contests, games, competitions of ideas, with a view to employer branding.

# Institutional dialogue

Main milestones and next steps

**July '20** 

Proposal for a resolution between ASPI and governmental institutions of the disputes/controversies arose from the collapse of the Morandi bridge (including charges totaling EUR 3.4 billion)



**Sept. '20** 

ASPI's submission of the new Economic and Financial Plan (EFP), drafted according to the new ART guidelines



Nov. '20

Discharge of the technical committee MIT, MEF and Palazzo Chigi



ASPI's acceptance of the Settlement and Additional Protocol to the Convention proposed by the Government, subject to the completion of the authorisation process



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**Finalisation** and formal **approval** of the EFP, the Settlement and the Additional Protocol. Waiting for the EFP to be sent to the CIPE

