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Modelling the 2035 and 2050 timeframes: key business and regulatory factors to be considered

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Details of the workshop are available at:

http://vista-eu.com/

Session 2

Modelling the 2035 and 2050 timeframes:

Key business and regulatory factors to be considered
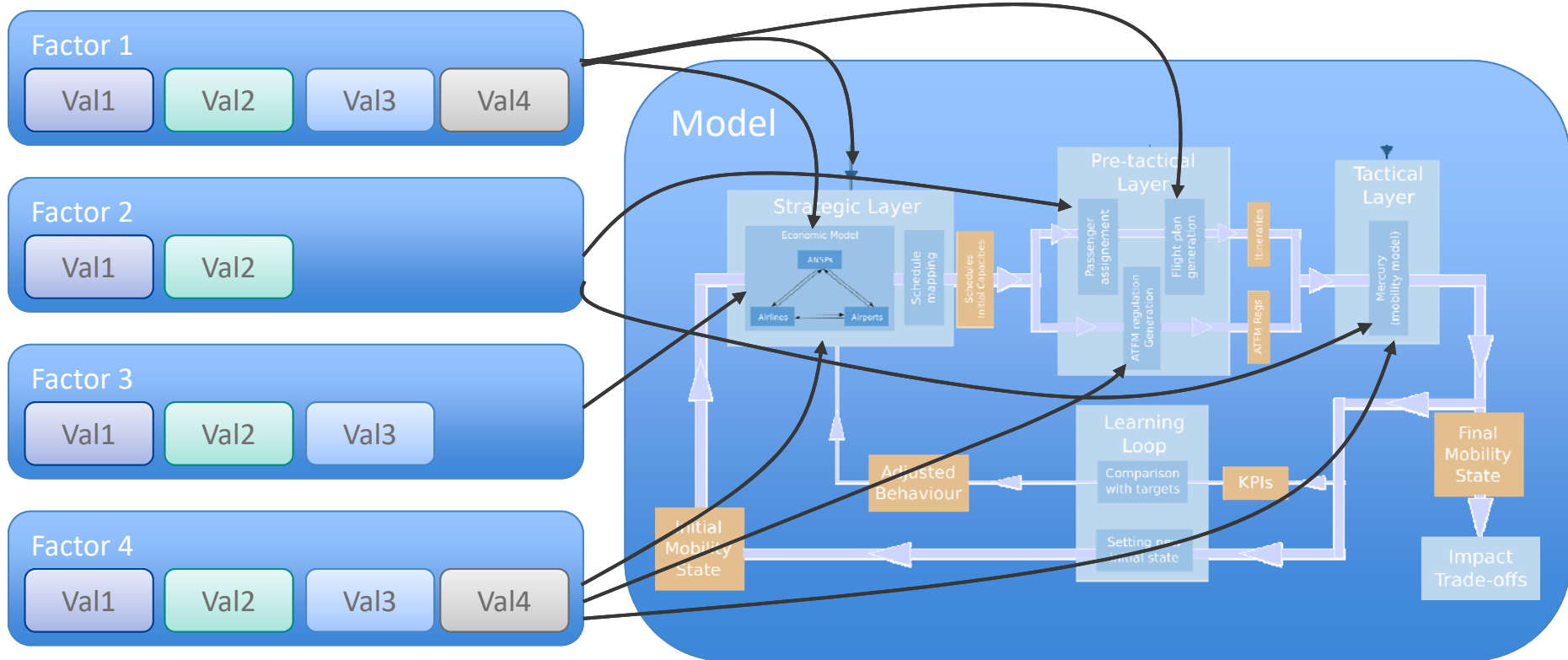
- **Regulatory factors**

- Regulations affecting gate-to-gate phase
   - SESAR development and integration (RSI): e.g., SES, Common projects.
    - Performance based regulations (RPB): e.g, Performance review body
    - ANSP requirements (RAR): e.g., Common requirements
- Regulations affecting airports
    - Airport demand (RAD): e.g., slots
    - Airport processes (RAP): e.g., ground handling market
    - Airport access / egress (RAA): e.g., airport access policies
- Regulations affecting other areas
    - Other regulations (ROR): e.g, passenger provision schemes, emission schemes

- **Business factors**

- Factors affecting gate-to-gate phase

  - SESAR operational changes (BTS): e.g., Free-routing

  - Other operational and technical changes (BTO): e.g., Passenger reaccomodation tools

- Airport processes and accessibility

  - Airport access / egress (BAA): e.g., multimodality

  - Airport processes (BAP): e.g., self-processing

- Demand and other economic factors

  - Demand evolution (BED): e.g., economic development

  - Other economic factors (BEO): e.g., fuel price
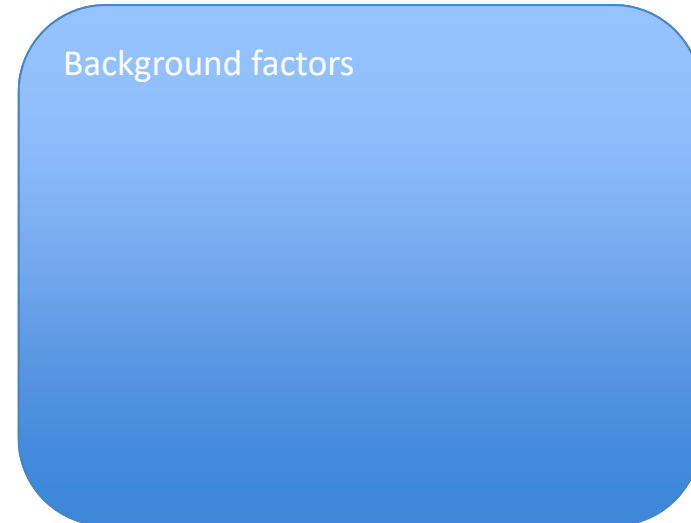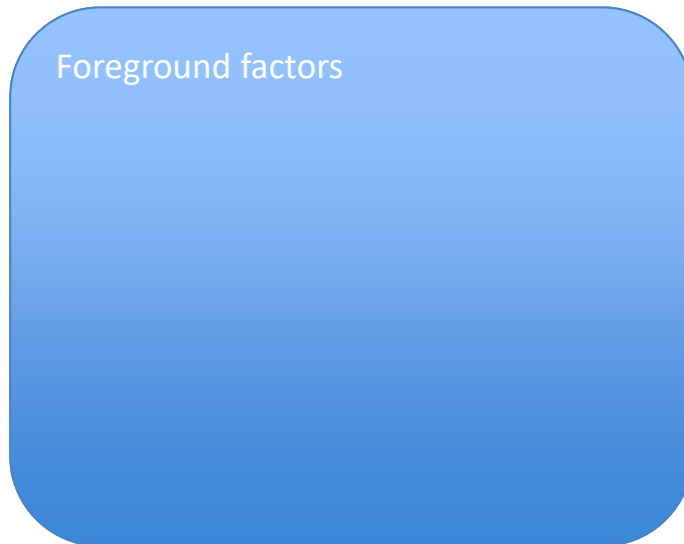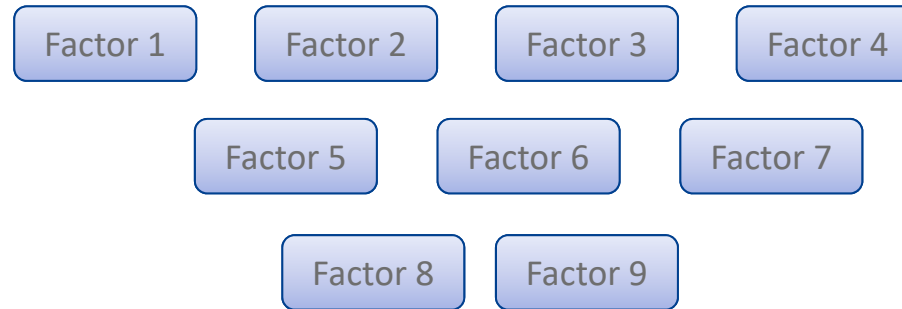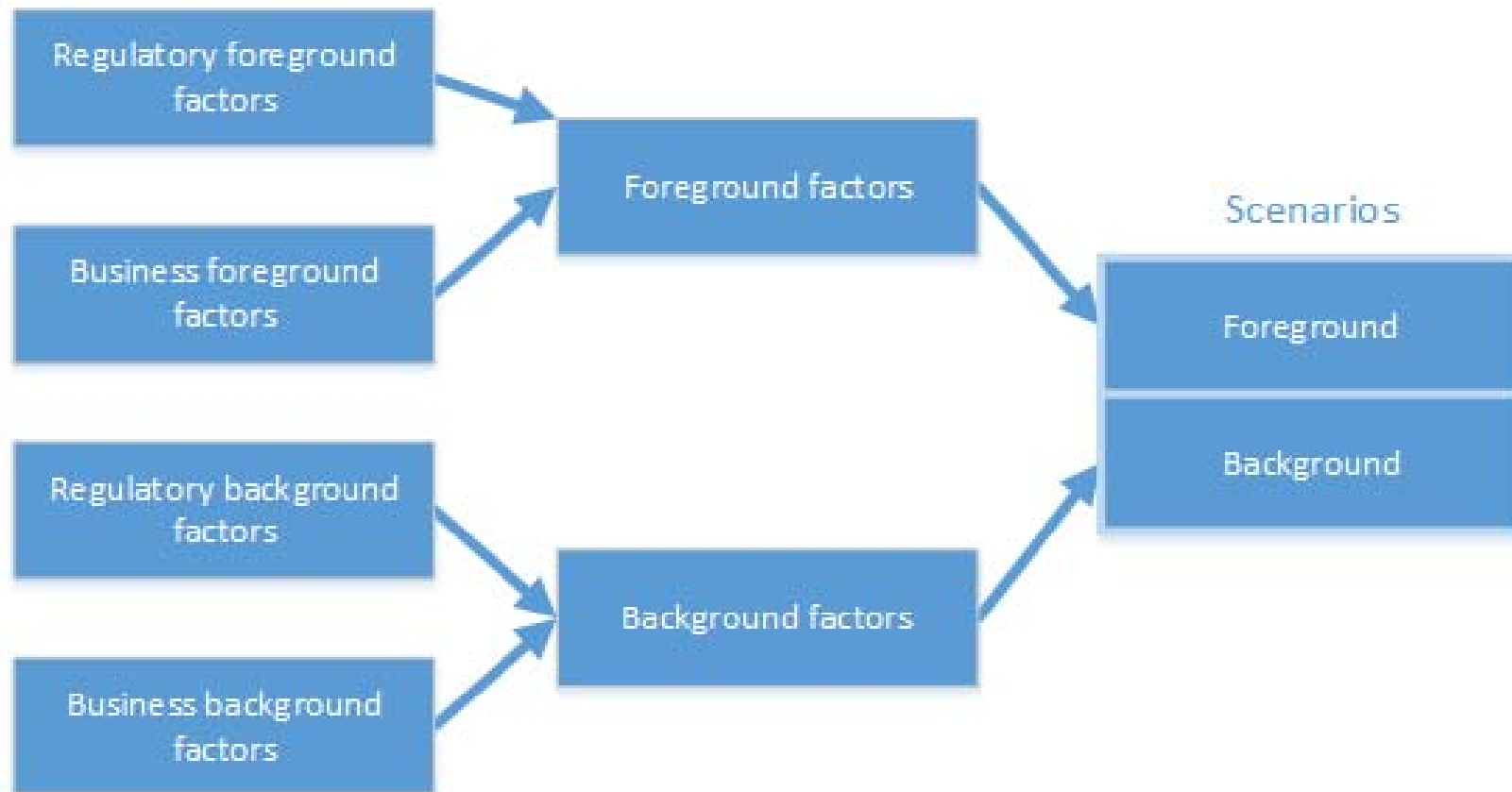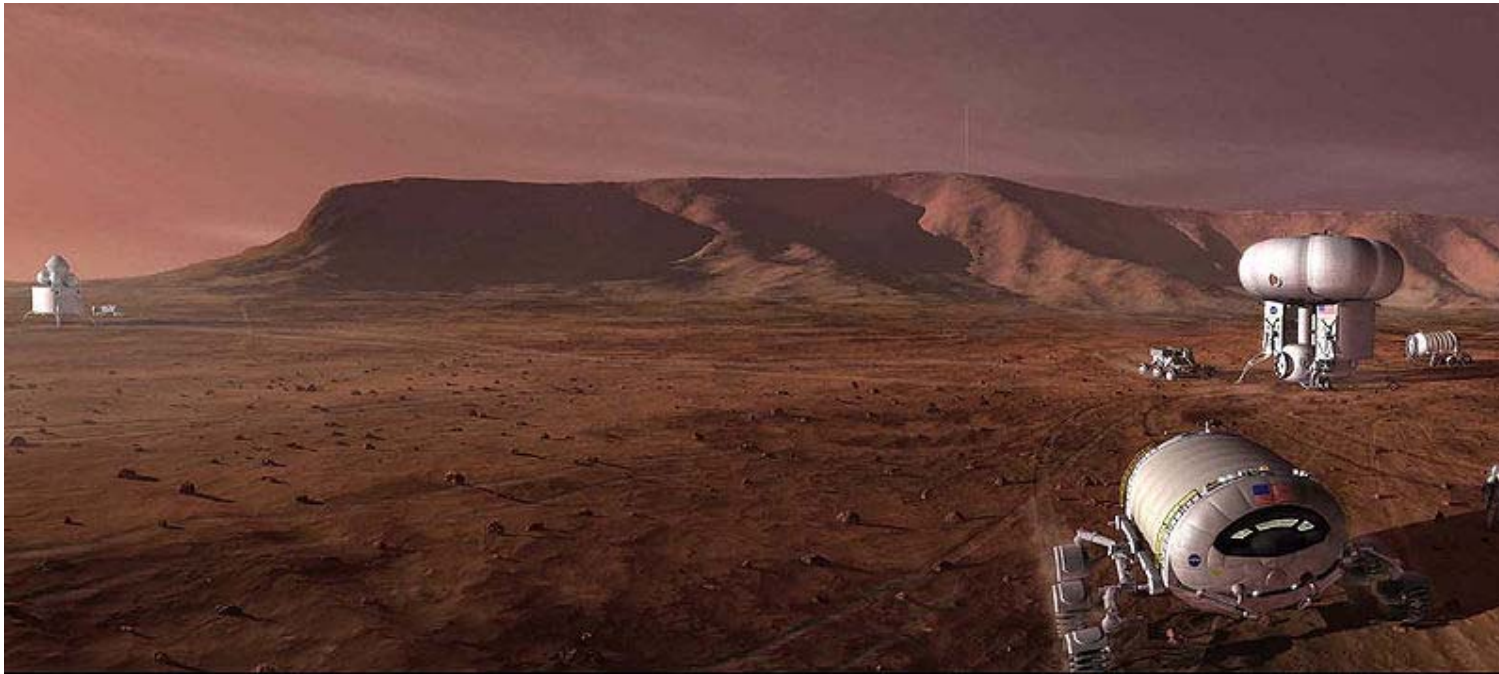
Airlines

Passengers

ANSPs

Airports

Environment

Current 2035 2050

Q1. What are the main factors affecting the evolution of the ATM system?

Q2. For each stakeholder, which other factors will greatly affect its performance/behaviour?

Q3. Which factors have a significant role in system evolution and also high uncertainty regarding their future realisation?

Q4. Which individual factor would you select to know its effect in the system in the 2035/2050 timeframe?

Group A

ID	Factor
BE01	Fuel price
RAD1	Airport slots
BED3	Societal travel characteristics changes
RPB1	Performance scheme
BEO2	Airspace charges
RAA1	Airport access
BEO3	Airlines business models
BTO7	Integrated turnaround/hub operations control
BTS12	Demand capacity balancing en-route

Group B

ID	Factor
RPB1	Performance scheme
BTS12	Demand capacity balancing en-route
BEO1	Fuel price
BTO7	Integrated turnaround/hub operations control
RSI1	Single european sky integration
RAD1	Airport slots
BTO1	Drones / RPAS
BTS5	4D Trajectory Management
BED3	Societal travel characteristics changes

Group A & B

ID	Factor
BE01	Fuel price
RAD1	Airport slots
BED3	Societal travel characteristics changes
RPB1	Performance scheme
BTO7	Integrated turnaround/hub operations control
BTS12	Demand capacity balancing en-route
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RAA1	Airport access
BEO3	Airlines business models
RSI1	Single european sky integration
BTO1	Drones / RPAS
BTS5	4D Trajectory Management

Vista Team

ID	Factor
BTS5	4D Trajectory Management
BTS9	Traffic Synchronisation
BTO4	Passenger reaccommodation tools
BEO1	Fuel prices
BEO2	Airspace charges
BEO4	Smart, integrated ticketing
ROR1	Passenger provision schemes
ROR3	Emission schemes
RAD1	Airport slots
RAD2	Regional airport development
RAA1	Airport access
ROR9	Operation of air services

Group A & B

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ID	Factor	ID	Factor
BTS5	4D Trajectory Management	ROR1	Passenger provision schemes
BTS9	Traffic Synchronisation	ROR3	Emission schemes
BTO4	Passenger reaccommodation tools	ROR4	Noise pollution
BEO1	Fuel prices	RAD1	Airport slots
BEO2	Airspace charges	RAD2	Regional airport development
BEO3	Airline business models	RAA1	Airport access
BEO4	Smart, integrated ticketing	ROR9	Operation of air services

ID	Factor		ID	Factor
BTS5	4D Trajectory Management		ROR1	Passenger provision schemes
BTS9	Traffic Synchronisation		ROR3	Emission schemes
BTO4	Passenger reaccommodation tools		ROR4	Noise pollution (implicit)
BEO1	Fuel prices		RAD1	Airport slots
BEO2	Airspace charges		RAD2	Regional airport development
BEO3	Airline business models (output)		RAA1	Airport access
BEO4	Smart, integrated ticketing		ROR9	Operation of air services

Foreground group	
EM: Environmental mitigation policies	PF: Passenger focus
RI: Regional infrastructures	SES: Single European Sky

Period	Name	Description
Current	Current	Default
2035	L35: Low economic Low Techno	**Economic growth is slow** in Europe **Technological** and operational changes are **not supported**.
	M35: High economic Low Techno	**Economic growth is high** in Europe **Technological** and operational changes are **not supported**.
	H35: High economic High Techno	**Economic growth is hi**gh in Europe **Technological** and operational changes are **supported**.
2050	L50: Low economic Low Techno	Idem L35
	M50: High economic Low Techno	Idem M35
	H50: High economic High Techno	Idem H35