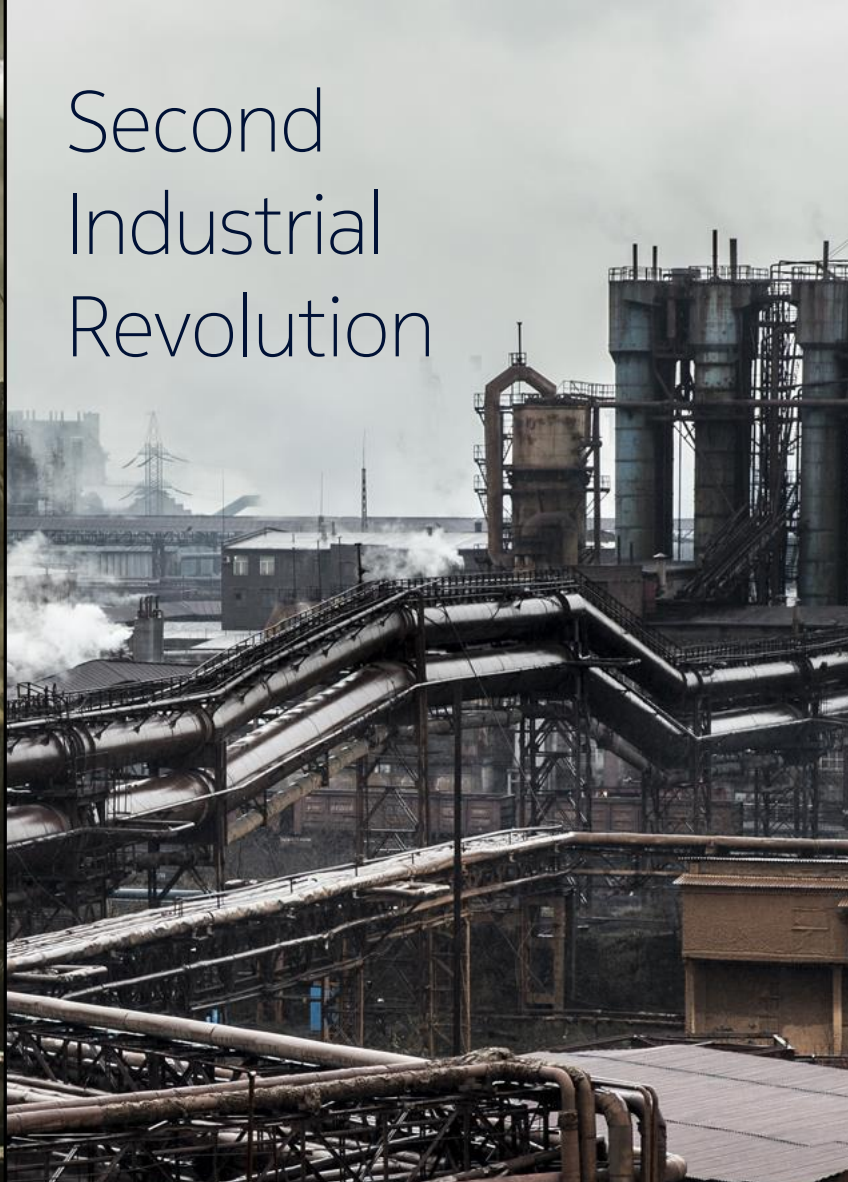


First  
Industrial  
Revolution



Second  
Industrial  
Revolution



Third  
Industrial  
Revolution



Welcome to the 4<sup>th</sup> industrial revolution





31,942 followers

13h

\*\*\*

2Mc5xBO



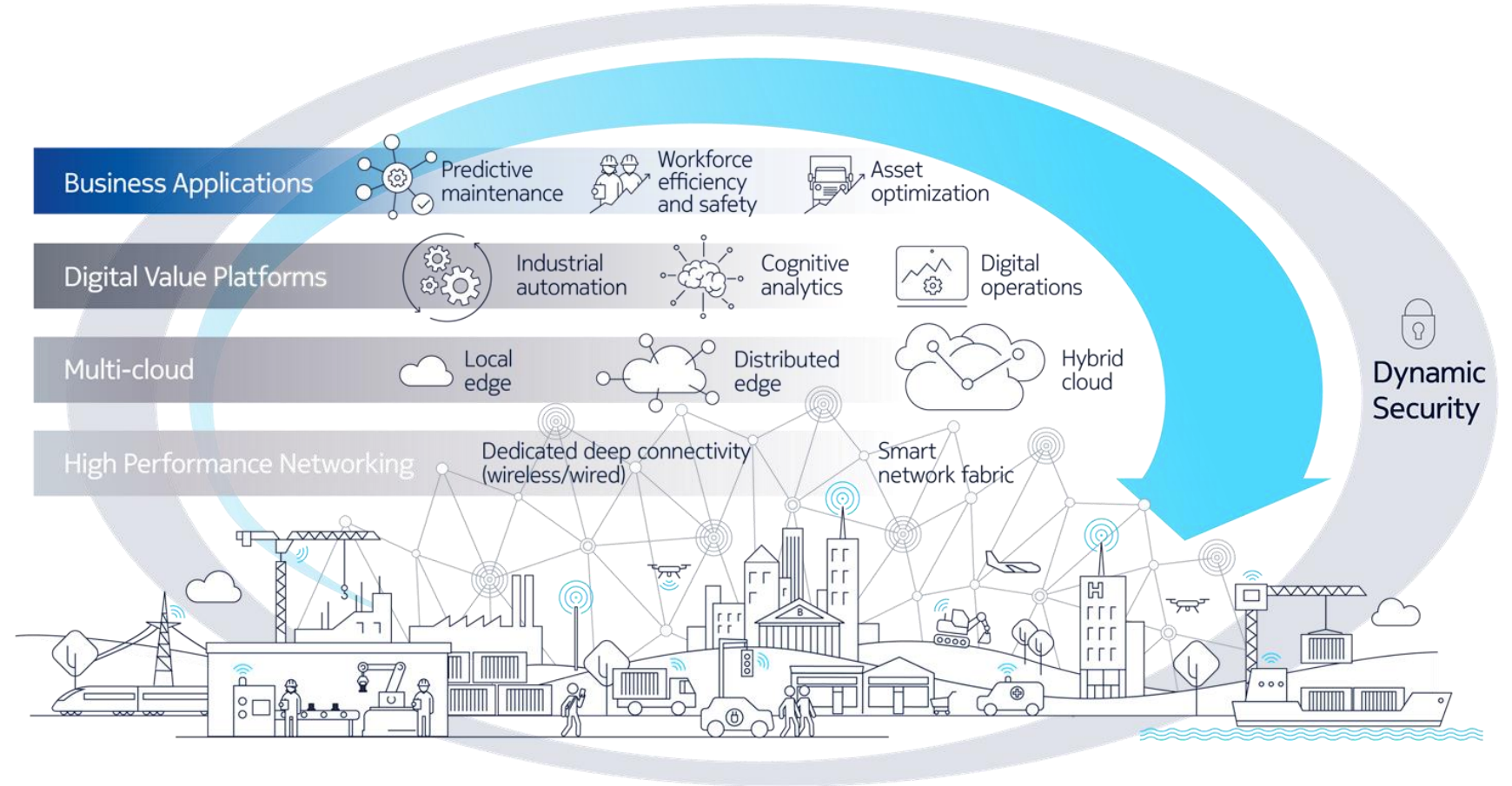
# Who are we?



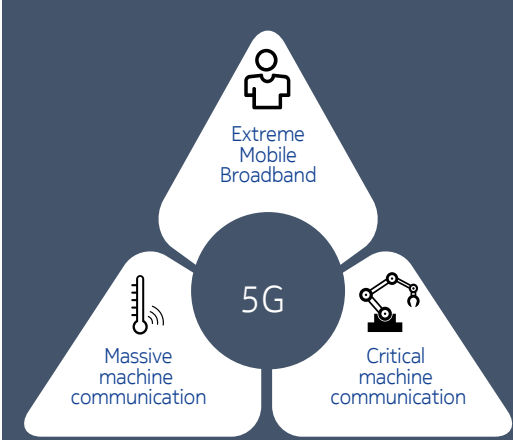
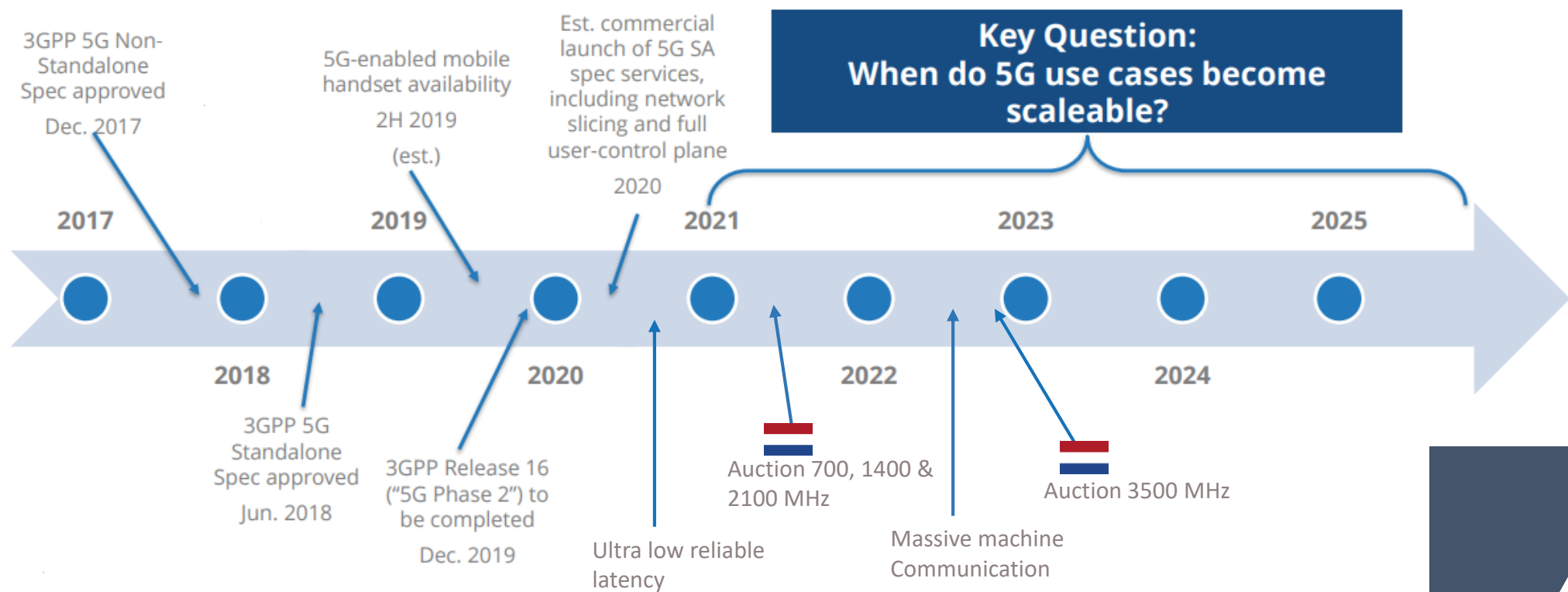
Hans J. Leijting  
Head of MSO Market  
Business Development / Innovation









Eric Kroon  
Head of services BeNeLux



# 5G Roadmaps

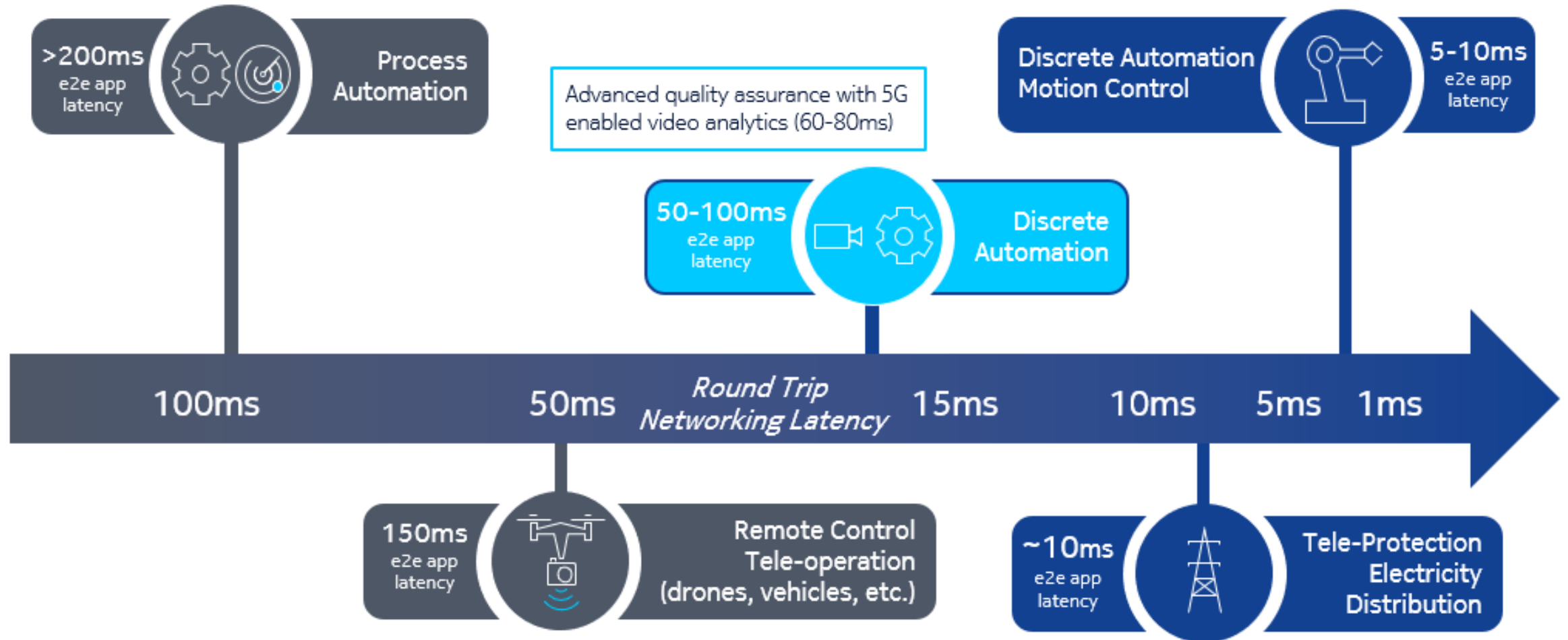


# 5G is a giant leap

	New technologies		New business case		New revolution	
	Today		2020-25			
Users	10M people		+100M 'things'			
Speed	100 Mbps		100x faster		Smart home	Mobile gaming
Latency	>>10 ms		10x less			
NW service level	Best effort for all		Committed SLAs		Industry 4.0	Connected cars
Logical networks	1		Many (slices)			
					Drones	IoT wearables

# Industrial Robotics and Automation

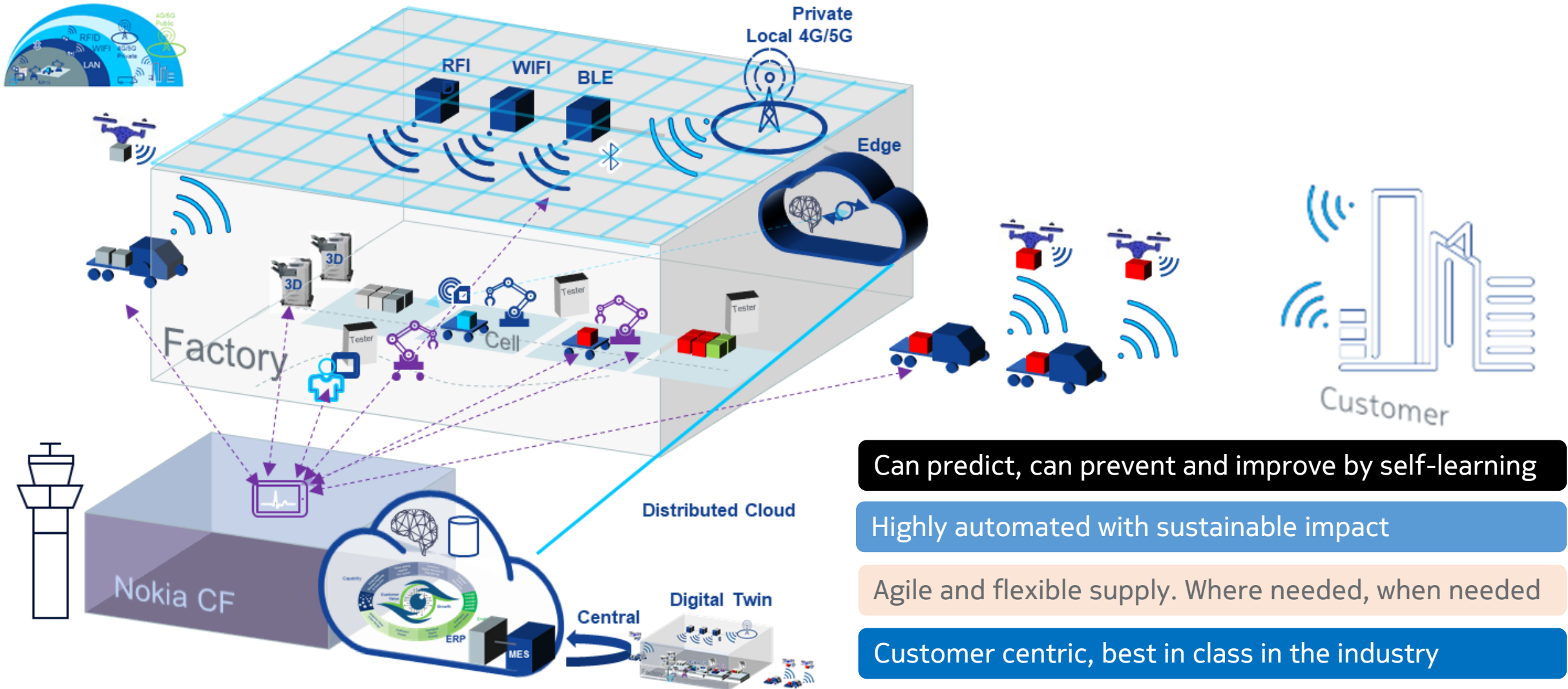
## Range of Latency Performance Classes





# Factory of the future

## 4th industrial revolution & digitalization at Nokia Oulu factory



What is digital transformation

What else to be considered?

1. Process Frameworks

2. Information Architecture

Average transformation time is 1.5 to 2 years

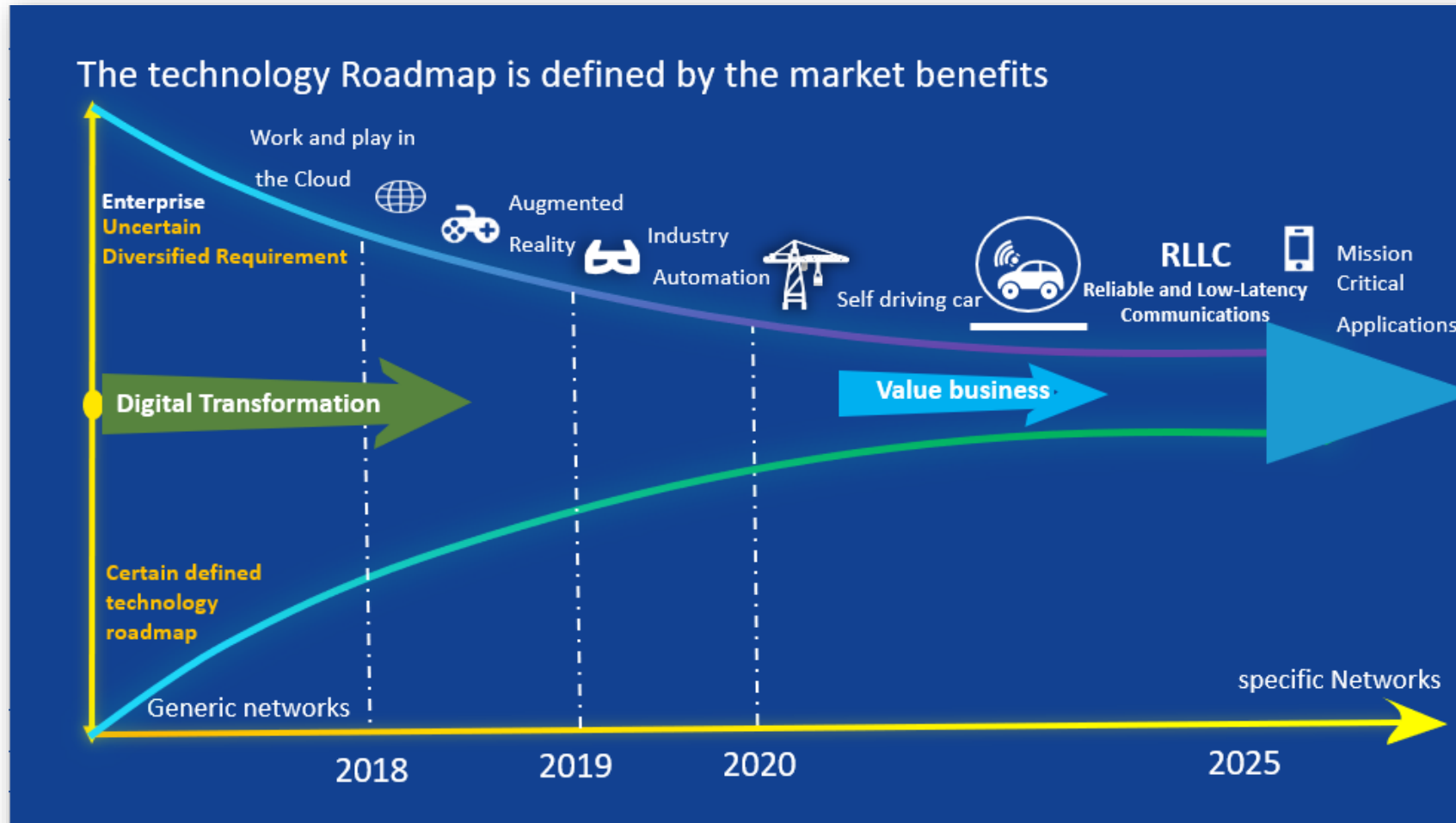
3. Inventories and Catalogues

4. Keep it simple

It is all about business effectivity



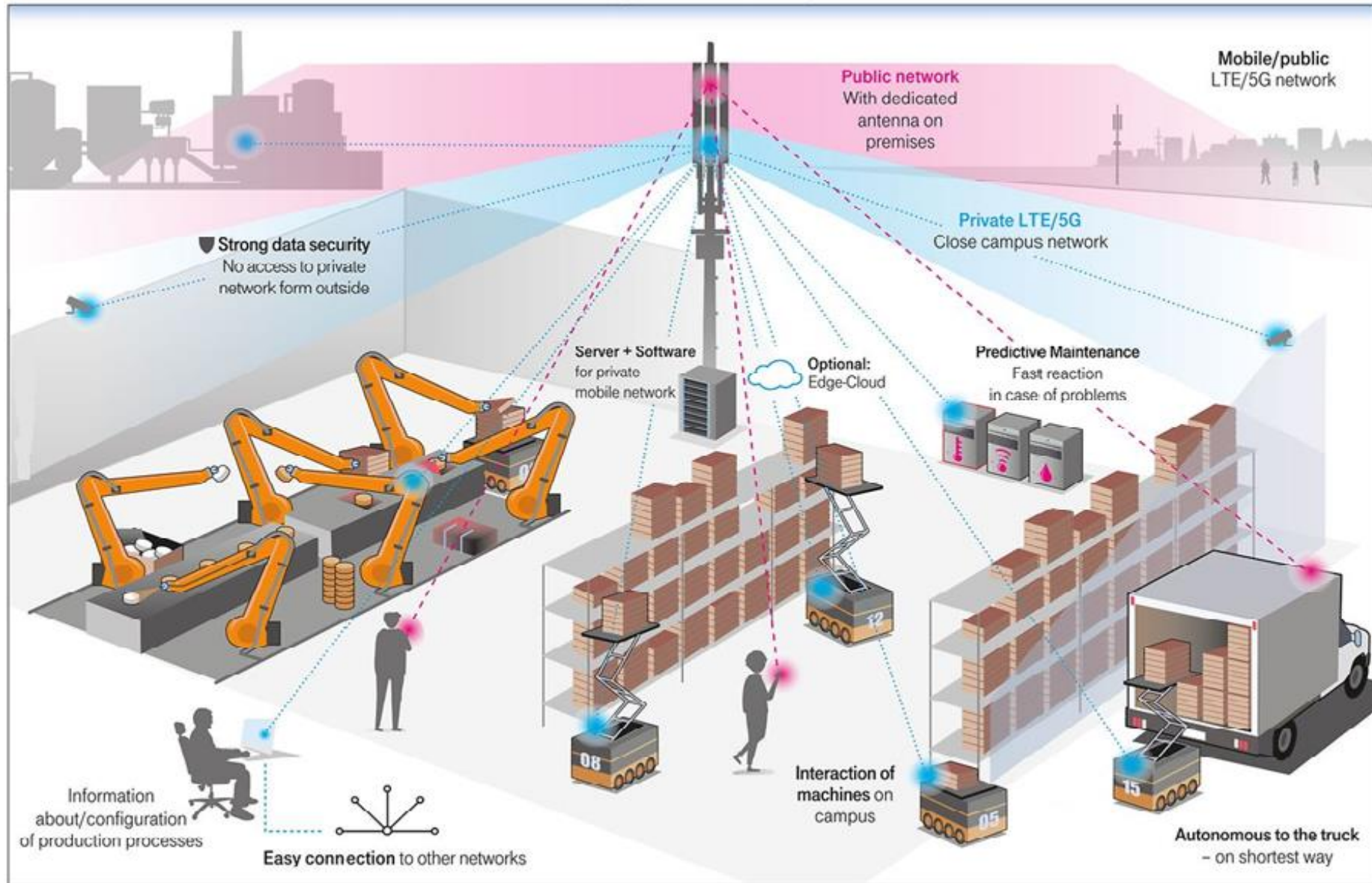
# What is important to 5G transformation criteria



## Technology roadmap will be defined by market benefits

- The connectivity technology roadmap is defined globally by 3GPP.
- This will drive customer innovation and business benefits (technology push meets market pull).
- Our managed connectivity services will bridge the gap between technology and customer demand.

# Network of the future







We're inventing  
the future

Come and visit us in Oulu Finland,  
Smart City or MWC 2020 in Barcelona