

Disruptive events in telecom market

Challenges and possible response

Proposed approach by NEC Corporation
Ziua Telecomunicatiilor

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MARKET CONTEXT

Fundamental shift in European telecom market

- Negative **macroeconomic environment**, leading to lower consumer spend
- Long tail **negative impact** of existing **regulations** (mobile termination, roaming, net neutrality)
- **Value migrating** from carrier to **OTT** (OTT and social networks crowding voice, messaging and media services)
- **Price based competition** leading to lower margin, increasing churn and higher commercial costs
- **Continuous investments** to sustain innovation and demand even at lower ROCE.
- Booming **smartphone penetration** and mobile data usage across market segments
- Growing demand for **integrated experience on multiple devices**, driven by the digitalisation of the daily life
- **Internet advertising** (personal, location based), taking over TV at rapid pace
- **All IP migration and transformation**, required to simplify the biz and increase flexibility
- **Trend for consolidation** (mergers, network alliances), given the quest for scale to compete.

Source: ATKearney

Resulting in:

- Market under complete transformation, departing from the known operating paradigm
- The challenges coming from the market cannot be managed by traditional measures - cost cutting, structure optimization, pressure for cost down to the suppliers. Everything has been tried already. Review of the fundamentals of the business model is critical for survival in the market.
- We see intensive collaboration between carriers in the market → network sharing, market alliances, procurement alliances, joint strategic evolution groups. It is primarily about scaling up, improved position versus competitors and investment efficiency.
- We do not see sufficient effort to change the offerings to the customer.



- Need to rethink about essential needs expected to be covered
- B2C or B2B2C, it always goes to the needs of the final customer.
- Engagement rules between carriers and strategic suppliers to be reconsidered → move from transactional relationship into wide boundary collaboration, long term future thinking for the needs of final customer and risk sharing pursuing the target.

NEC'S APPROACH

“C & C” - Integration of computers and communications

NEC
Confidential

In 1977, then-Chairman Koji Kobayashi presented the concept of “C&C”

“to talk and see between any persons, at any time, at any place on the earth, in the early days of the next century.”

“all technology, communications, computer and television will be, and should be, integrated.”

“it is important to help countries to be able to participate in such a worldwide telecommunications system.”



Koji Kobayashi(INTELCOM 1977)

NEC's focus: Solutions for Society

Needs



Solutions

Public Sector & Energy

Smart cities, smart traffic control, smart water management, renewable energy storage, e-administration, disaster prevention, security...

Telecom Carriers

Information networks, emergency service communications, submarine cables, mobile systems...

Enterprise

Logistics, distribution, transport, production management, plant management...

Converging advanced computer & communication solutions

Big data engines:

Invariant analysis

RAPID machine learning

Textual entailment recognition

Heterogeneous mixture learning

Security

Environment

Power grid

Energy storage

LTE

SDN

Cloud

Data centre

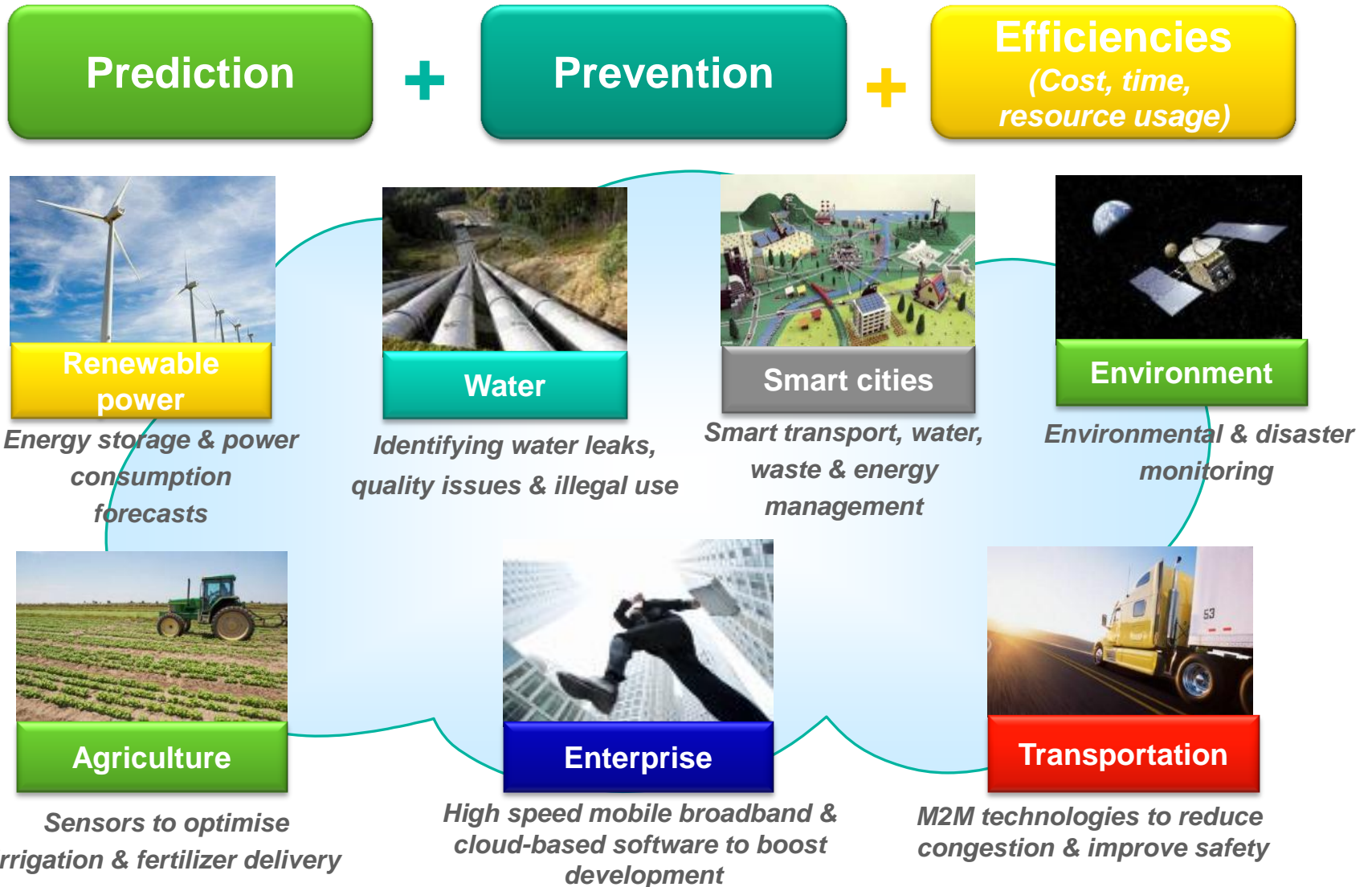
Diverse sensor, management & control systems

Energy solutions

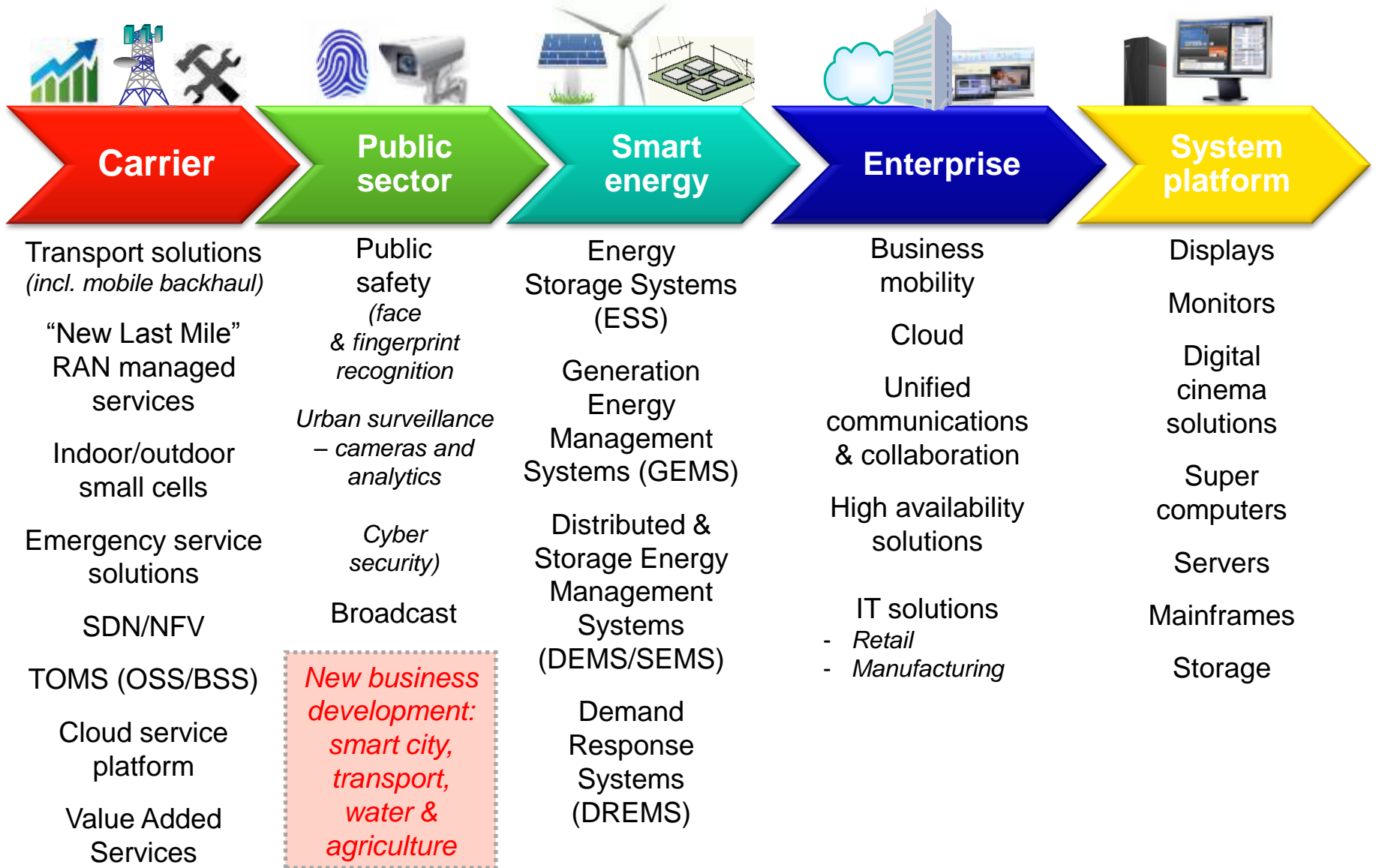
Next generation network technologies

High performance, high reliability core IT technologies

Social infrastructure applications



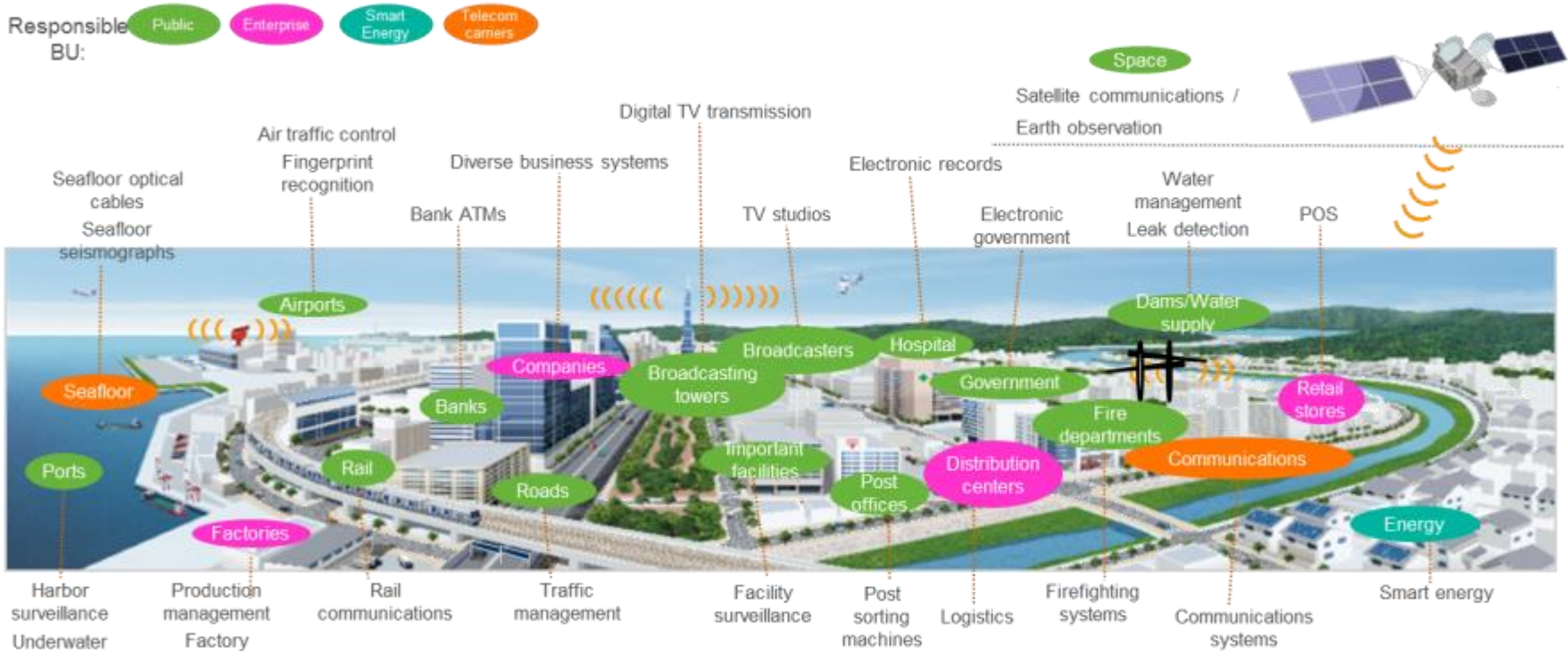
Key solution areas in Europe



Innovation of Social Infrastructure via ICT

Leveraging our proven results and strong position for global expansion

- From the seafloor to outer space, concentrating management resources in areas in which social infrastructure will be innovated by ICT



NEC ICT supporting social infrastructure and systems

Next-generation network technologies

High-performance, high-reliability core IT technologies

Diverse sensor and human interface technologies

Empowered by Innovation

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