

Addressing the digital infrastructure challenge

Tuesday 15 December 2020, 10:00 GMT

PANELLISTS



Webinar chair
Siobhan Benita
Former UK senior civil servant



Indrek Önnik
Global Affairs Director,
Government CIO Office,
**Ministry of Economic
Affairs and
Communications**
Estonia



Dieter J. Tschan
E-Government
Representative for the
Swiss Confederation,
**Ministry of Finance
(FDF), Federal IT
Steering Unit (FITSU)**
Switzerland



Ashley Lumsden
Director of Government
and Public Affairs,
**Huawei Technologies
(UK)**



Morten Meyerhoff Nielsen
EGOV Advisor at Operating
Unit on Policy-Driven
Electronic Governance,
UNU-EGOV,
**United Nations University
(UNU)**

GLOBAL
government
FORUM

Knowledge Partner





Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Eidgenössisches Finanzdepartement EFD
Informatiksteuerungsorgan des Bundes ISB

GLOBAL **government** FORUM

Addressing the digital infrastructure challenge

December 15th, 2020





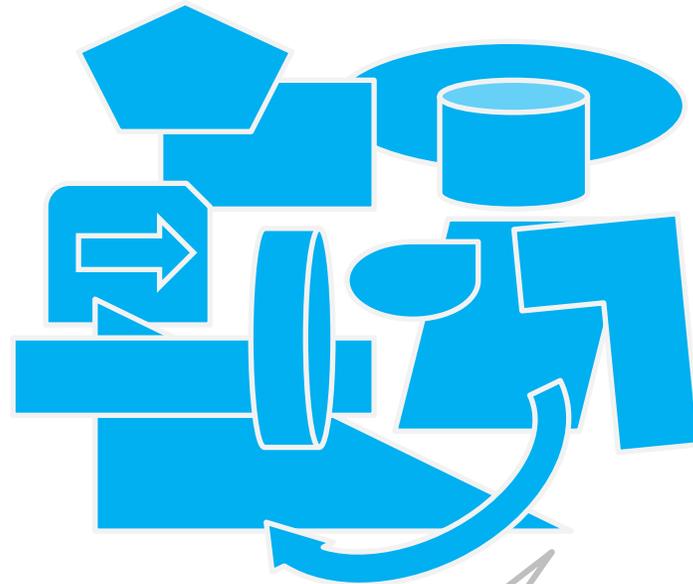
Addressing the digital infrastructure challenge: Some Key Basic Services

- Reliable, fast, efficient and secure Network infrastructure:
 - Not only for the cities
- Electronic Identity (E-ID):
 - Fast high penetration; as a PPP with banks, public transports, Telco etc.
 - Decision by the people (federal vote, 2021-04-07)
- Identity and Access Management (IAM):
 - Expansion & further development of electronic solutions for identity and access management
- Electronic Payment and Signature:
 - Simple, fast, cheap and reliable payment and signature solutions
- Document and Data storage & exchange:
 - Secure exchange and storage (download and upload) of data/documents; exchange between administration, population & business; Data Hub [Sedex]
- Cloud / Cloud Services:
 - Modern cloud infrastructure & cloud application ecosystem for ICT services from public and private clouds for all administrative units; legal issues?
- AI?

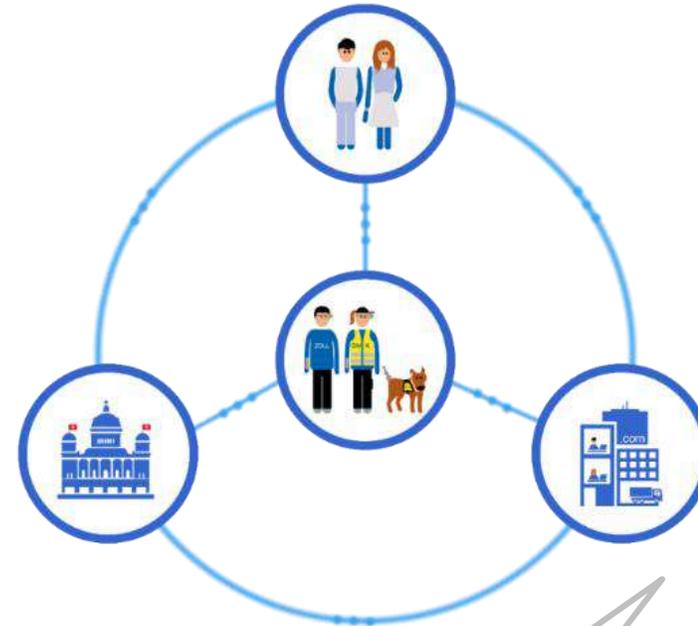


Addressing the digital infrastructure challenge: Basic Philosophy regarding Digital Transformation

Basic philosophy regarding digital Transformation: Simplify first, then digitize !



- Reduce complexity first
- Rethink process
- Digital technology must simplify, not add complexity



- Clear Vision
- Customer oriented
- Value added for all parties involved
- Simple Access
- Top Leadership support

Addressing the digital infrastructure challenge: Making Digital Transformation a Success Story

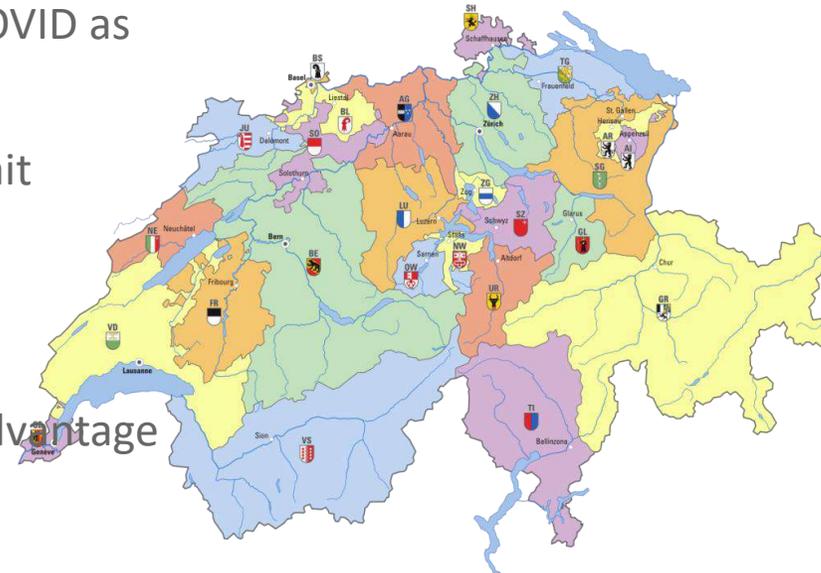


Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

nment
suisse · svizzera

- Conclusions -

- Key basic infrastructure & services a mandatory requirement
- Digital transformation is not for ourselves, but for our clients! Add value to the three stakeholder/client groups by knowing their needs (GtoC / GtoB / GtoG)
- Use the “Tallinn Declaration” as compass & guideline
- Rethink and renew when OK, keep established and good solutions when OK
- Learn fast, develop fast and fail fast (use COVID as an enabler and accelerator)
- Change of Culture: failure is good; don't wait for eternity. Top Level support is key!
- Federalism as a framework condition:
Three levels of government (C/C/C);
Communities as test labs; Use it for your advantage



Addressing the digital infrastructure challenge: Investing after Covid

15 December 2020

Mr Ashley Lumsden
Director of Government and Public Affairs
Huawei Technologies (UK) Co., Ltd.



The likely strength of the economic recovery remains highly uncertain

How different economic recovery scenarios could play out



Source: Brookings Institution
© FT

Views from leading economists



Professor Paul Krugman, Nobel Memorial Prize in Economic Sciences

Krugman proposes a government led investment-centered stimulus almost indefinitely (for the US but other countries by extension). "It would cushion the economy when adverse shocks hit... it wouldn't hurt either, given low interest rates and the need for public investment."

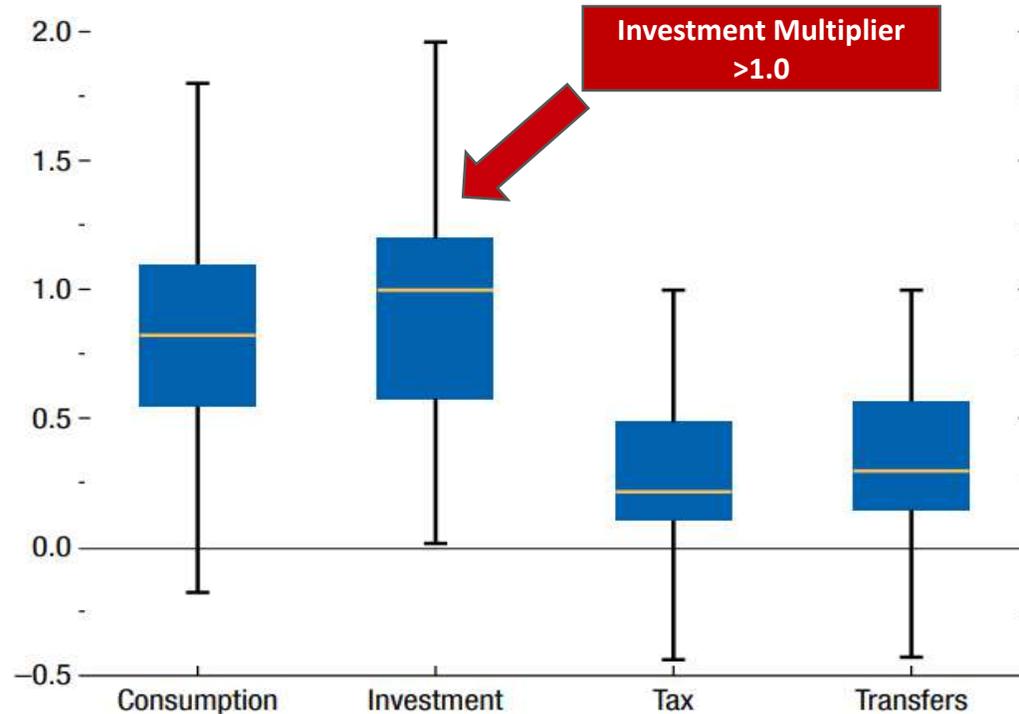


Professor Larry Summers, Former Chief Economist World Bank and Former Director National Economic Council

Summers believes the impact of Covid-19 will be to deepen Secular Stagnation. Risk aversion in the private sector will increase permanently, leading to more precautionary savings by households, and less investment by businesses. As he puts it, "just in case will replace just in time"

Fiscal stimulus through government investment proven to provide the best return

Average fiscal multipliers for public spending from the literature are about 1, with that for public investment slightly higher than that for public consumption. Average multiplier estimates for taxes and transfers are about one-quarter that size.



Source: Gechert and Rannenberg (2018).

Note: The chart reports the median (gold line), the 25th and 75th percentiles (lower and upper boundaries of the blue box) and the extremes (lower and upper whiskers) of the distribution of fiscal multiplier estimates from the literature. The multiplier is defined to be the change in real output for a unit change in the indicated fiscal instrument.

Fiscal Support

In economics, the fiscal multiplier is the ratio of change in national income arising from a change in government spending.

The International Monetary Fund (IMF) advised governments in April 2020 that the best fiscal multipliers result from increased government expenditure in investment (infrastructure in particular). Better than increased consumption by government, decreases in taxation and transfers to citizens.

Moreover, a study by the European Commission (2016) suggests the direct multiplier alone on 5G infrastructure investment is around 2.5, far in excess of general infrastructure investment.

Source: European Commission 2016. *5G deployment could bring millions of jobs and billions of euros benefits, study finds.* <https://ec.europa.eu/digital-single-market/en/news/5g-deployment-could-bring-millions-jobs-and-billions-euros-benefits-study-finds>

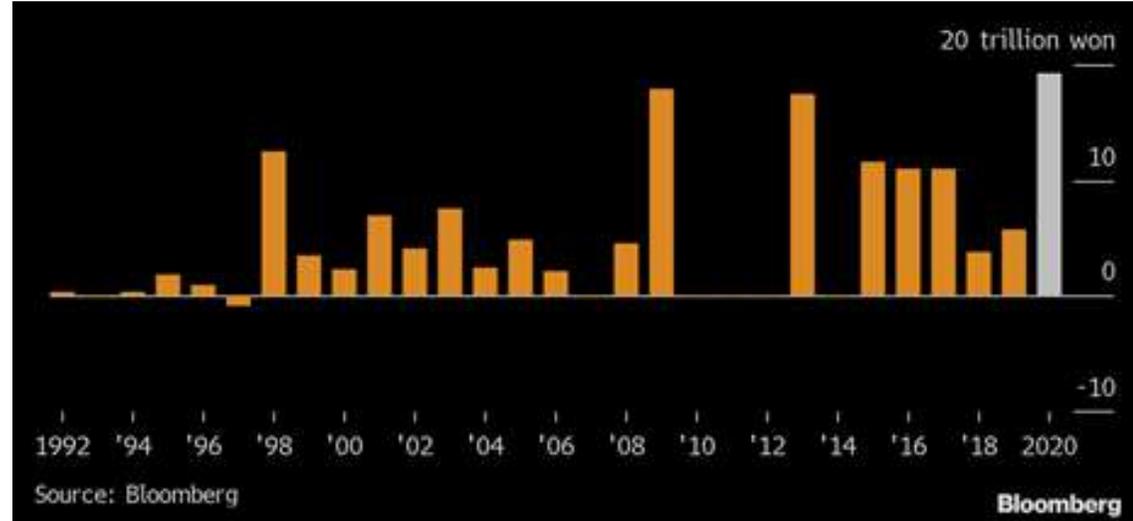
South Korea: Announces a “Digital New Deal” to boost economic recovery



Major fiscal stimulus announced



Represents biggest fiscal boost in decades



Korea to become leading Digital Nation

On May 7th 2020, the South Korean government greatly increased its commitment to investing into the digital economy. Its new deal project for job creation and COVID-19 response.

Speaking later in May, President Moon Jae-in stated “The Korean version of the New Deal is a new national development strategy to leap from a follower country to a pacesetter nation.”

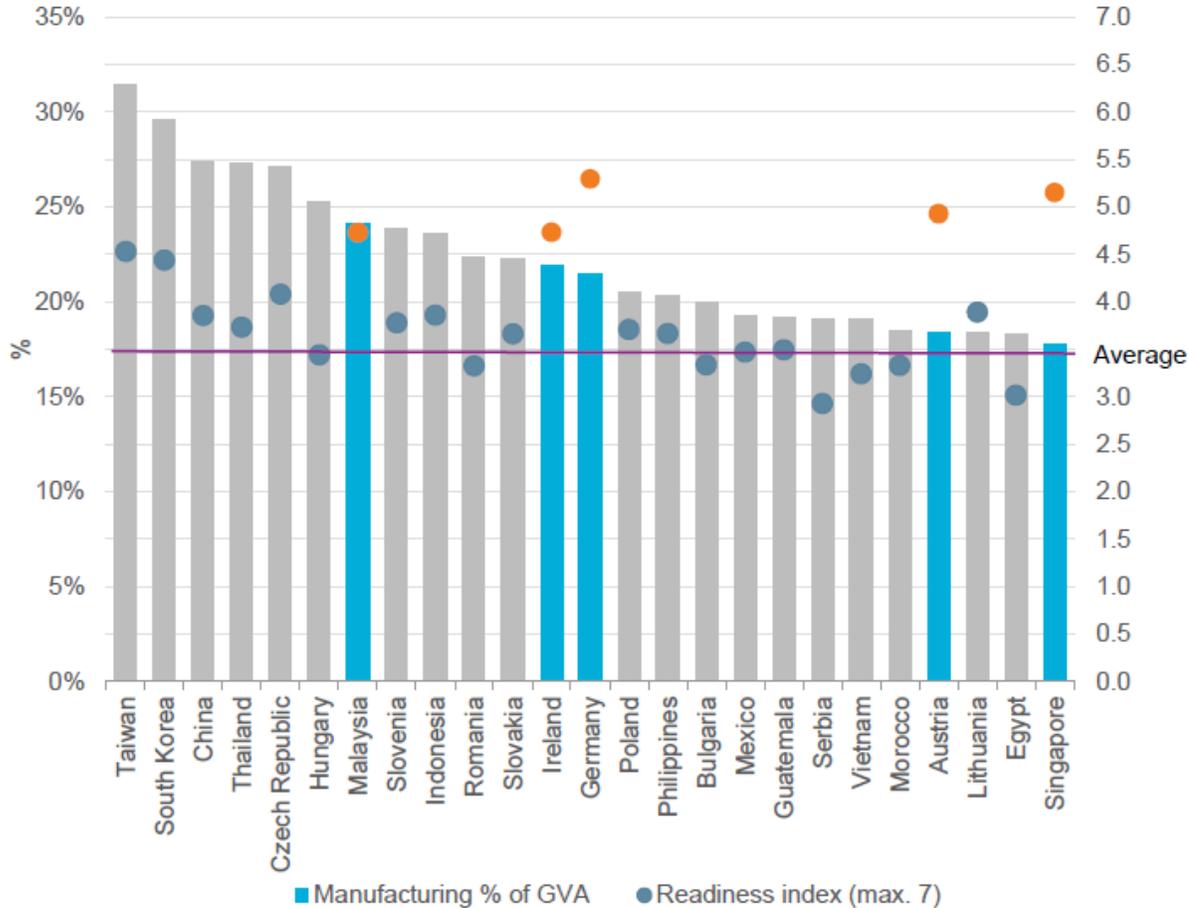
Digital “New Deal” to focus on 10 major initiatives

- (1) Data infrastructure enhancement for every cycle
- (2) Greater data collection and utilization for the convenience of the public
- (3) Early 5G infrastructure establishment and roll-out
- (4) 5G convergence promotion
- (5) AI data and infrastructure expansion
- (6) AI convergence in every industry
- (7) Preparation for more non-contact services
- (8) Cloud and cyber security network enhancement
- (9) Digitalization of old infrastructure components
- (10) Digital logistics service system establishment.

In May the German government commits to "Investment in Future Mobility"



Top 25 Countries with Largest Manufacturing Share and Readiness to Adopt Industry 4.0 Solutions



Note: Orange Dots - Countries most ready to adopt new production methods

Source: Euromonitor 2017. *Industry 4.0: China to Challenge Germany in Race for Industry 4.0 Adoption.* <https://blog.euromonitor.com/china-challenge-germany-race-industry-4-0-adoption/>

- German Federal Transport Minister Andreas Scheuer is proposing a €28-billion (\$31 billion) "Investment Future Mobility" economic stimulus package to boost investments in digital infrastructure and rail transport.
- Scheuer stated "that the coronavirus pandemic had showed how important a well-developed digital infrastructure is" adding that "it has brought to light the necessity of a sustainable expansion of broadband and mobile communications networks."
- As part of the investment, €3 billion should go to the federal digital infrastructure fund, while another €5 billion would be necessary to spur a "quantum leap" in network expansion that includes expanding access to 5G networks.
- Enhanced mobile broadband infrastructure will also boost Germany's high-profile Industrie 4.0 strategy for next-generation digital manufacturing.

Spain: fiscal stimulus through subsidies to boost telecoms operators



Fiscal Measures:

Spain's central government will provide 16 billion euros in aid to the autonomous regions, with 6 billion euros to be disbursed immediately and the remaining 10 billion euros to be disbursed twice in the second half of the year.

New Program Launch to support connectivity: **Giga Society**

The government plans to release Giga Society within one month to support the connectivity. This solution is a government subsidy scheme that encourages operators to invest in low-yielding areas, as part of the post-pandemic economic reconstruction plan of the Spanish government.

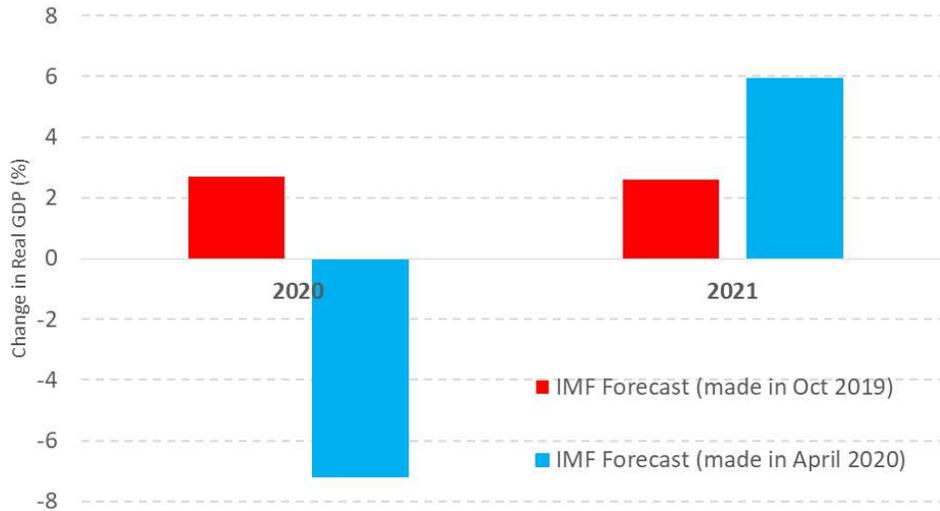
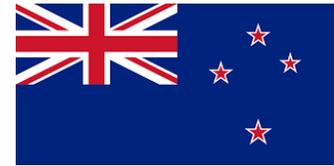
5G Pilot Project

The government's determination to promote 5G remains unchanged. The second phase of the state-subsidized 5G pilot project is in process.

Source: Spain public information

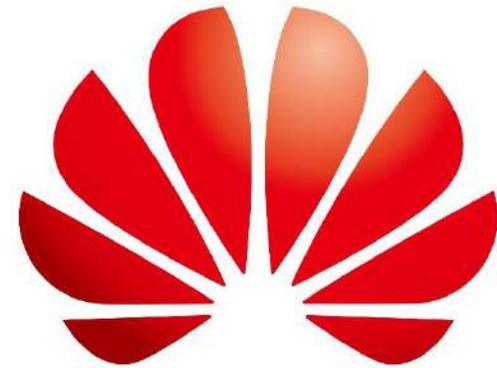


New Zealand - replaces 5G spectrum auction with fixed-price allocation



- New Zealand's spectrum auction for 3.5GHz band was scheduled for February 2020, but was postponed to the end of May due to the coronavirus crisis.
- Mindful of the macroeconomic pressures that New Zealand is facing in 2020 and a potentially fragile economic recovery, its government decided in mid-May to support the economy and relieve pressure on its telecoms companies.
- It will now allocate the spectrum in blocks of 10MHz for the low fixed price of NZ\$250,000 (€138,736) per 10 MHz of bandwidth.
- The New Zealand government stated that it believes that 5G will help drive the economic recovery and encourage wider business investment.

Thank You!



HUAWEI