ITS, a Japanese Long Term Strategy



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"Comprehensive Plan for ITS in Japan"

ITS is defined in the "Comprehensive Plan for ITS in Japan", issued by the then 5 ministries in 1996, as follows:

ITS is a "comprehensive infocommunications system dealing with transportation."

- Japan considers ITS as a tool and an opportunity to apply and develop telecommunication infrastructure for the transport sector while most countries have positioned their ITS plans as integral parts of their transportation policy.
- From 2010, Energy ITS concept introduced







Policy: ITS for the Ubiquitous Society

Pro/Con **Japan** USA Gore lost the Based on Gore launched election: NII project Comprehensive **National** was not pursued Plan (1996), u-Information A lost decade for Japan (2004) and Infrastructure (NII) USA: no links New IT Reform in 1993 between NII and ITS until mid 00s Strategy (2006), Harvard's Vehicle Infrastructure ITS is considered to Branscomb argued Integration (VII) play an important project started in in 1996 that ITS 2006 role in the was missing in the On the other hand, Ubiquitous Society. Japan provided a NII project direct relationship between ITS and telecommunication from mid 90s. The Fully Networked Car International Telecommunication Geneva, 3-4 March 2010

ITS Through Different Phases and Shifts

Period	From 1980	From 1995	From 2004	From 2013 Integrated Approach?
ITS World Congress in Japan		1995 Yokohama	→2004 Nagoya	Policy shifts coincided with ITS world congress which took places in 1995/Yokohama and 2004/Nagoya
Main Policy documents		Comprehensive Plan for ITS in Japan (1996), for an advanced info-telecom society	New IT Reform Strategy (2006), for an Ubiquitous Society	New ITS policy document?
Society concepts		Info-Telecom Society	Ubiquitous Society	New Society concept?
Policy	•Transport policy	•Telecom policy (ITS as info-telecom system dealing with transportation) •Infrastructure building	•IT as problem solving, utilization of infrastructure	New Policy?
Policy stakeholders	Independent Ministries 1. Five Ministries 2. semi-public organizations	Prime Minister supervision 1. Prime Minister 2. Four Ministries, 3. Semi-public organizations	 Prime Minister (supervision) Four Ministries, Semi-public organizations (increasingly) ITS Japan 	New ITS coordinating entity?







From Developmental State to Entrepreneurial State

- Catch-up phase
- Industrial policy
- Sustaining technologies
- · Pushing private sector

Developmental State

Technological Frontier

- Innovation needed
- Entrepreneurship needed

- Front-runner phase
- Innovation policy
- Disruptive technologies
- Pulling private sector

Entrepreneurial State

- Schumpeter and Yu contends that an entrepreneurial state is
 - a government acting as entrepreneur and when
 - its agents exercise alertness in the discovery of technological innovation opportunities.

The Fully Networked Car Geneva, 3-4 March 2010



 a government acting as entrepreneurial state







Public-Private Partnership (PPP) in Japan

Public-Private partnerships

- Advanced Cruise-Assist Highway Systems (AHS)
 - MOC launched research and development for AHS jointly with the AHS Research Association (AHSRA), formed by 21 enterprises
- Advanced Safety Vehicle (ASV)
 - ASV project was launched by MOT to incorporate advanced technologies for greater safety in vehicles

o VICS



- public sector on
 - policy and
 - technology for road infrastructure
- private sector on
 - technology in vehicles



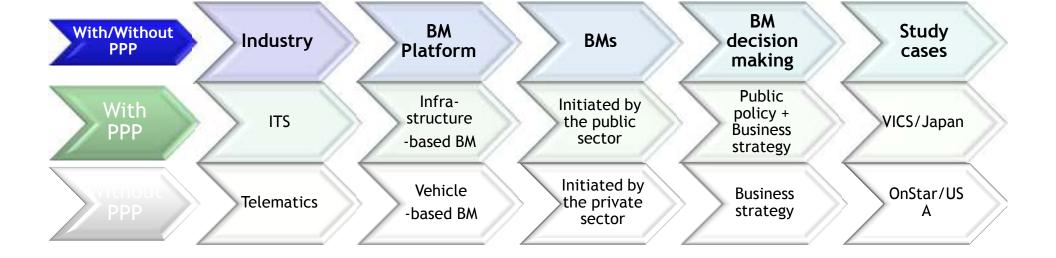
- PPP combine the capabilities and resources to create win-win situations for partners involved.
- o Partnerships are designed to complete what each organization is not capable of realizing on its own for the reason of lack of resources, expertise, or experiences.







Partnership: PPP Impacts on Industry Structure and Business Model (BM)









- For METI, the auto industry has the greatest impact on the Japanese economy than any other industry.
- Japanese car makers considering ITS: ITS would mean a shift from product-based industry to a both products & service-based industry.
- As car, telecom and related services industries are all part of ITS, ITS has the capacity to be an engine for the entire Japanese economy.

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...To ITS Lead Position -New ITS Industry-

o ITS as emerging industry:

- What the public sector does (or doesn't) in relation to ITS have a direct and profound effect on industry structure and business models.
- Technology itself is not the problem: partnership, users perspective, packaged services and ultimately business models are the challenges.

o ITS as <u>local and global</u> industry:

- Need to lead locally and globally simultaneously
- Need to succeed globally where i-mode has not succeed
 - OnStar study case is interesting as it is the only ITS/Telematics success to globalize overseas (although its business model is built on different type of partnership in regards to Japan).





