



Towards Spatially Enabled Societies

The impact of "Cadastré 2014" in relation to Spatial Data Infrastructure (SDI)



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Cadastré 2014




...Cadastré 2014 provided a **simple** yet **effective framework** for supporting the evolution of cadastral systems for the future. It established a set of universal principles that all countries could work towards.

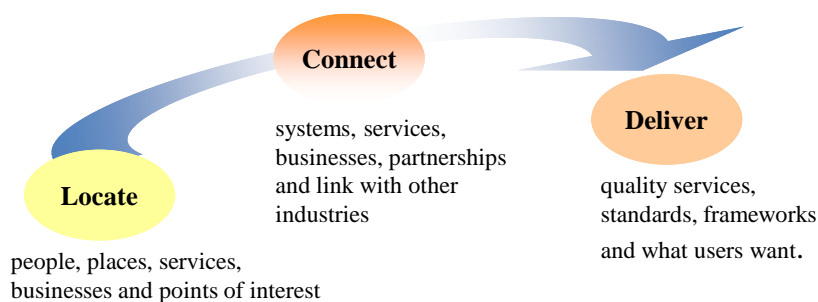
On the event of its **twentieth year** since conception, I wish the driving team the very best and continued success in its endeavours.



A Value Chain Enabled by an SDI

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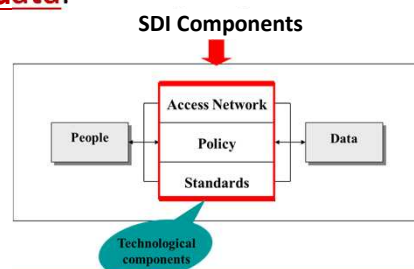
SDIs have emerged as both a **fundamental network infrastructure**, as well as an **enabling platform** to help achieve the vision of a **spatially enabled society** as it aims to connect **people to data** to facilitate decision-making.



SDI and Cadastre 2014

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- **Bogor Declaration**, it was inevitable that **Cadastre 2014** would impact upon **SDIs** as well.
- The emphasis of **Cadastre 2014** on **information integration** and shifts in **collaboration dynamics** across stakeholders carved a greater role for **SDIs** in **connecting people and data**.



SDI and Land Administration

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SDIs together with **land administration**, can provide the unique ability to produce important and fundamental information about the **places people create and use** –

the cornerstone for supporting the development of a **spatially enabled information environment**.



Spatially Enabled Societies

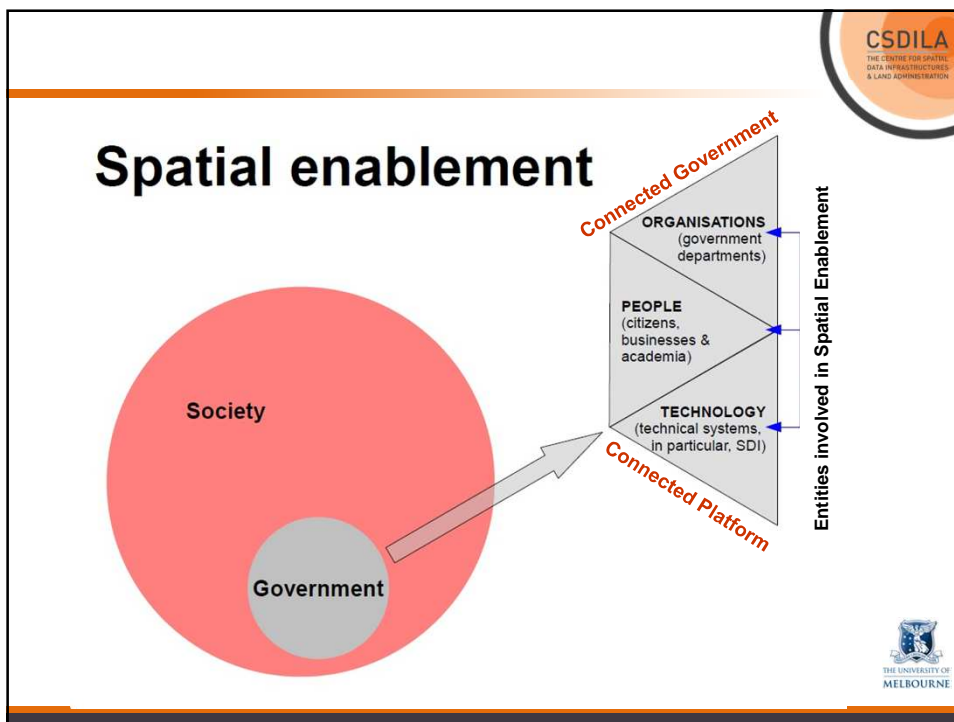
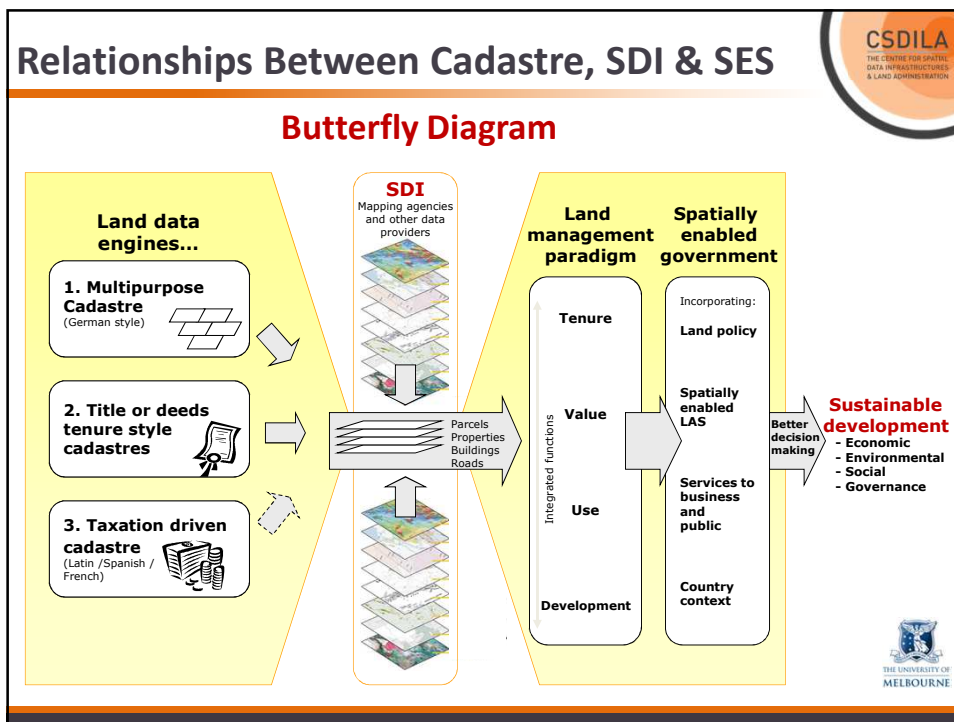
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Spatially Enabled Societies has been driven by -the **cadastre** providing a foundation in land and property information and

SDIs providing an enabling platform for facilitating location-based information and services;


..together, they present a **powerful paradigm** for building capacity for addressing the global agenda and achieving sustainable development goals.





Enhanced Evidence Based Decision Making

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Detailed evidence base to inform decision making

Targeted Government assistance

25 Smith Street = -35.5676, 135.6587

Address	25 Smith Street
Purpose	Residential
Damage	75%
Date	10/01/2011
Event	Flood
Floor Height	0.8 metres
Value	\$210,000
Population	4
Assistance	Required




Flood extents

Imagery

Base data

Fundamental location data



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(Pigram & Scott 2011)

Spatially Enabled Societies

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2007



2010



2012



2013

SES is now part of the objectives of governments in many countries, highlighting the importance of spatial information and strategies in policy development and decision-making in the public sector.



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SES and Cadastre 2014

«Spatially Enabled Society»

Stuedler and Rajabifard, editors, 2012 FIG Publication no. 58

FIG REPORT
FIG PUBLICATION NO. 58

Spatially Enabled Society

Editors
Daniel Stuedler and Abbas Rajabifard

FIG PUBLICATION 58

This publication on "Spatially Enabled Society" is the culmination of a three year effort by the FIG Task Force that was established by the General Assembly of the Federation in May 2009. The Task Force included representatives from the Global Spatial Data Infrastructure Association and Working Group 3 of the United Nations sponsored Permanent Committee on GIS Infrastructure for Asia and the Pacific. This is a collaborative effort led by the FIG Task Force and the publication has been compiled and edited by Dr. Daniel Stuedler, Chair of the FIG Task Force on Spatially Enabled Society, and Prof. Dr. Abbas Rajabifard, President of the GSDI Association.

The rapid development and increased demand for spatial information infrastructures in many jurisdictions these past many years have made spatial information an invaluable tool in policy formulation and evidence-based decision making.

Spatial enablement, that is, the ability to add location to almost all existing information, unlocks the wealth of existing knowledge about social, economic and environmental matters, play a vital role in understanding and addressing the many challenges that we face in an increasingly complex and interconnected world. Spatial enablement requires information to be collected, updated, analysed, represented, and communicated, together with information on land ownership and cadastre, in a consistent manner to underpin good governance of land and its natural resources, whole-of-government efficiency, public safety and security towards the well being of societies, the environment and economy.

The main issue societies have to focus on is probably less about spatial data, but much more about "managing all information spatially." This is a new paradigm that still has to be explored, deliberated and understood in the context of a spatially enabled society.

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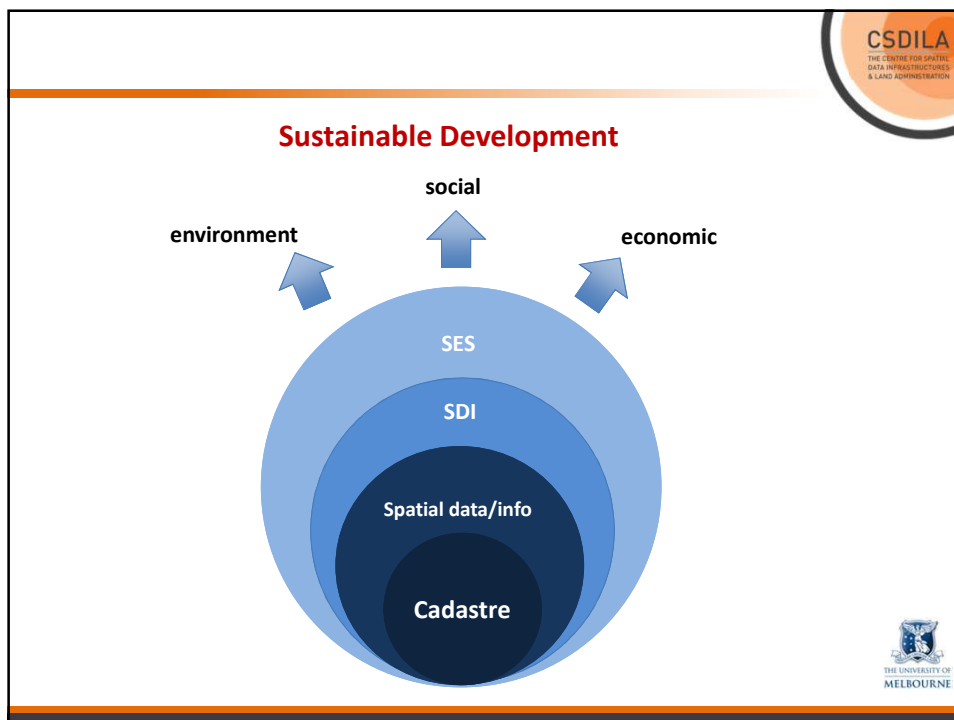
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Six Key Elements for a SES

- **Legal framework** for basic geoinformation;
- **Common Data integration concept:**
 - legal and institutional independence of information (to allow for independent responsibilities);
 - common geodetic reference framework;
 - standardized data modelling concept;
- **Positioning infrastructure** for the common reference framework;
- **Network infrastructure** to enable integration and sharing of spatial data through the spatial data infrastructure SDI;
- **Landownership information** as one of the basic information topics;
- **Data and information:**
 - official, authentic, complete, comprehensive, updated;
 - accessibility of data i.e. public sector information initiatives;
 - volunteered geographic information (VGI), web 2.0 possibilities.



Conclusion

Cadastre 2014 has been an important platform in **helping to shape the future of SES**;

.. in particular, in shaping the **cadastre as a foundation** for modern **LAS** and as **an important component for SDI** and the basis for the delivery of **SES**.

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