網路發展趨勢研習營

前瞻資通訊發展及應用之國際趨勢
主要國家發展策略

TH Schee 徐子涵 - 2015 Jan 24 Taipei

v20150122

開放、互連、湧現
http://kk.org

https://www.flickr.com/photos/34547181@N00/11121355345/

壹. 從ㄅㄆㄇㄈ開始

什麼是網路世代？

- Leonard Kleinrock - 1934年生
- Bob Kahn - 1938年生
- Vint Cerf - 1943年生

Fadi Chehadé - 1962年生，ICANN CEO 是比較年輕了。

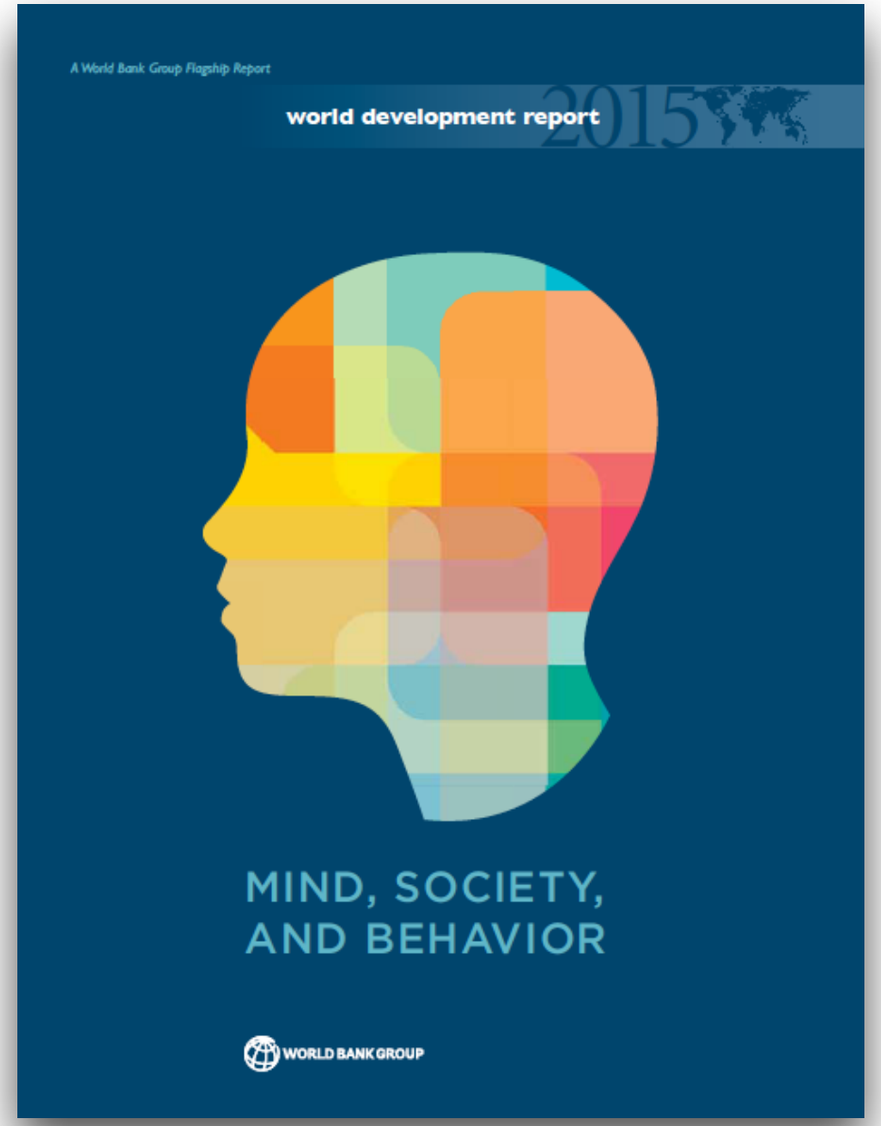
UNGA: WSIS

UN: MDG

ITU: ICT Development Index

OECD: KII

WEF: GCR



WBG: WDR 2015

CDP Carbon Disclosure Project

CLTS Community-Led Total Sanitation

EE entertainment education

FAFSA Free Application for Federal Student Aid

HDI Human Development Index

HPA hypothalamic-pituitary-adrenal

IPCC Intergovernmental Panel on Climate Change

KAP knowledge, attitudes, and practices

MFI microfinance institution

NGO nongovernmental organization

OECD Organisation for Economic Co-operation and Development

ORS oral rehydration salts

ORT oral rehydration therapy

PATHS Promoting Alternative Thinking Strategies

R&D research and development

RCT randomized controlled trial

ROSCA rotating savings and credit association

RSV relative search volume

SES socioeconomic status

SMarT Save More Tomorrow

SMS short messaging service

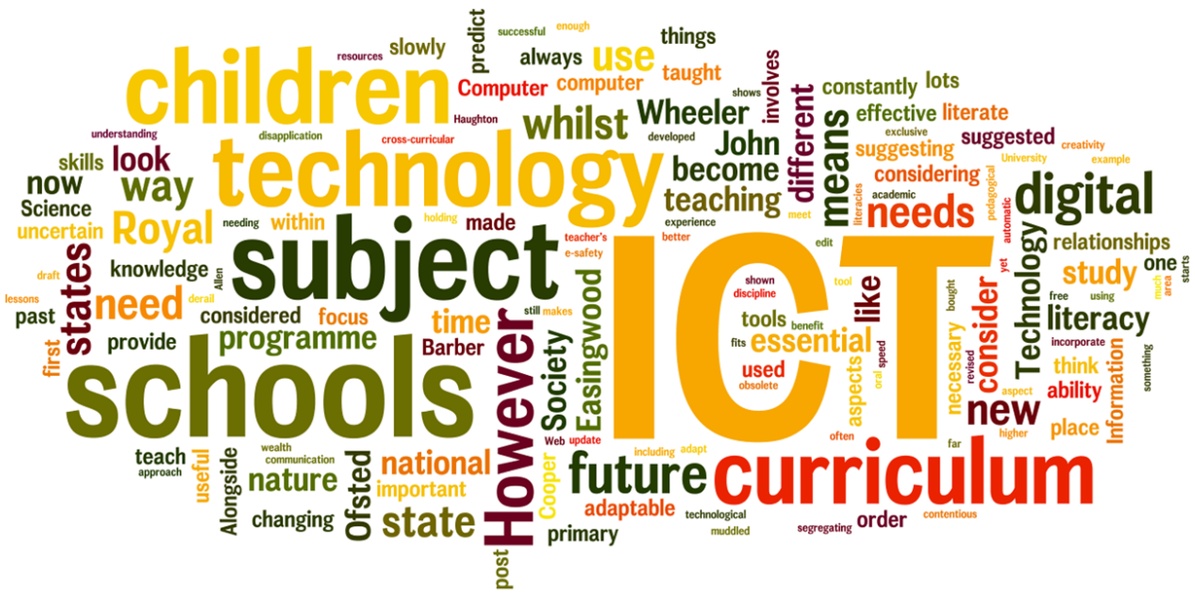
UNICEF United Nations Children's Fund

WDI World Development Indicators (database)

WDR 2015 team team for the 2015 World Development Report

WHO World Health Organization

http://schee.info

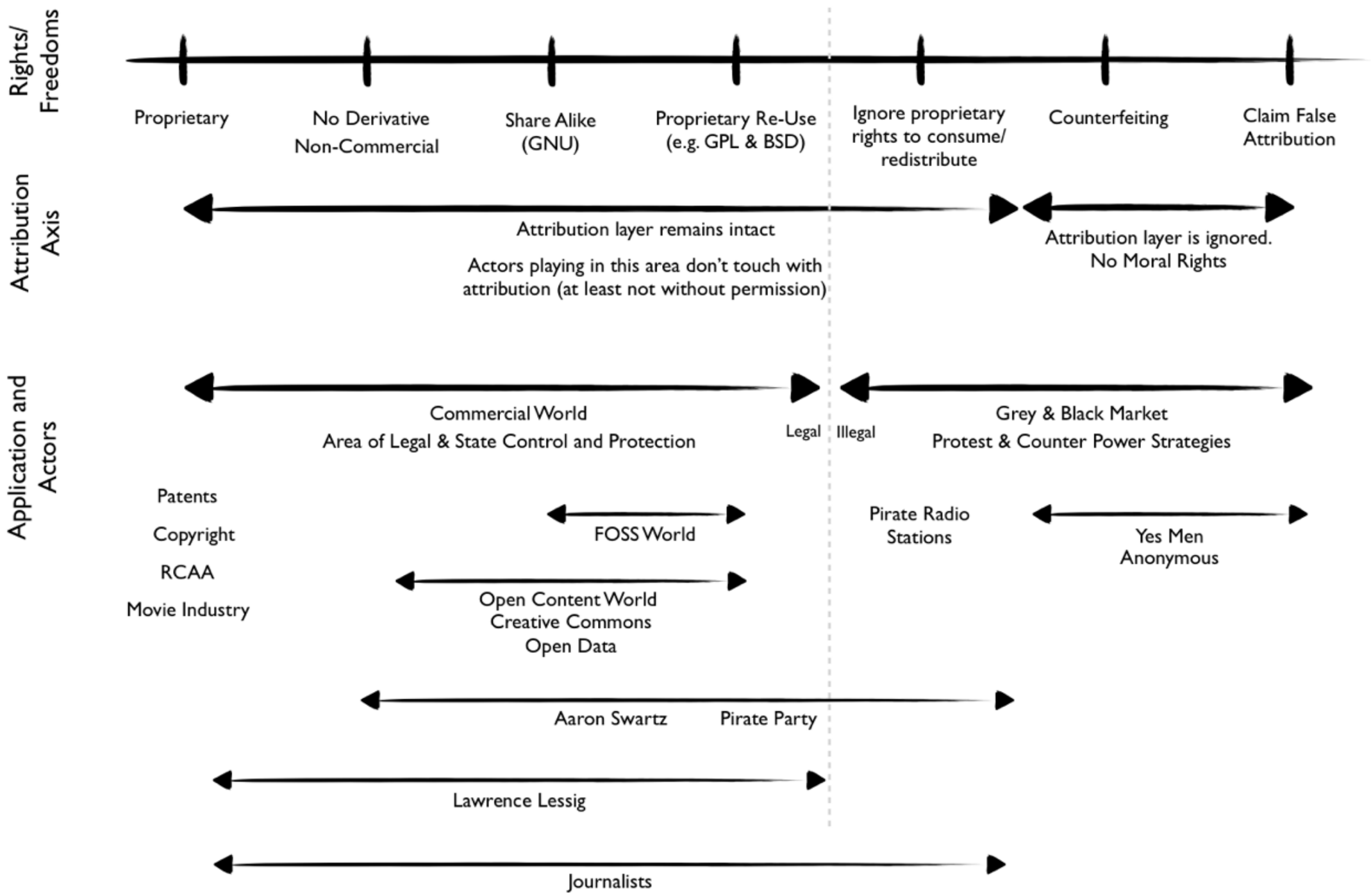


http://www.digitalmeetsculture.net/article/preforma-the-berlin-open-data-culture-hackathon/

https://ict4dblog.wordpress.com/2014/01/30/analysing-the-post-2015-development-agenda/

http://mypad.northampton.ac.uk/cmcdonald/

Mapping the Definition and Use of Open

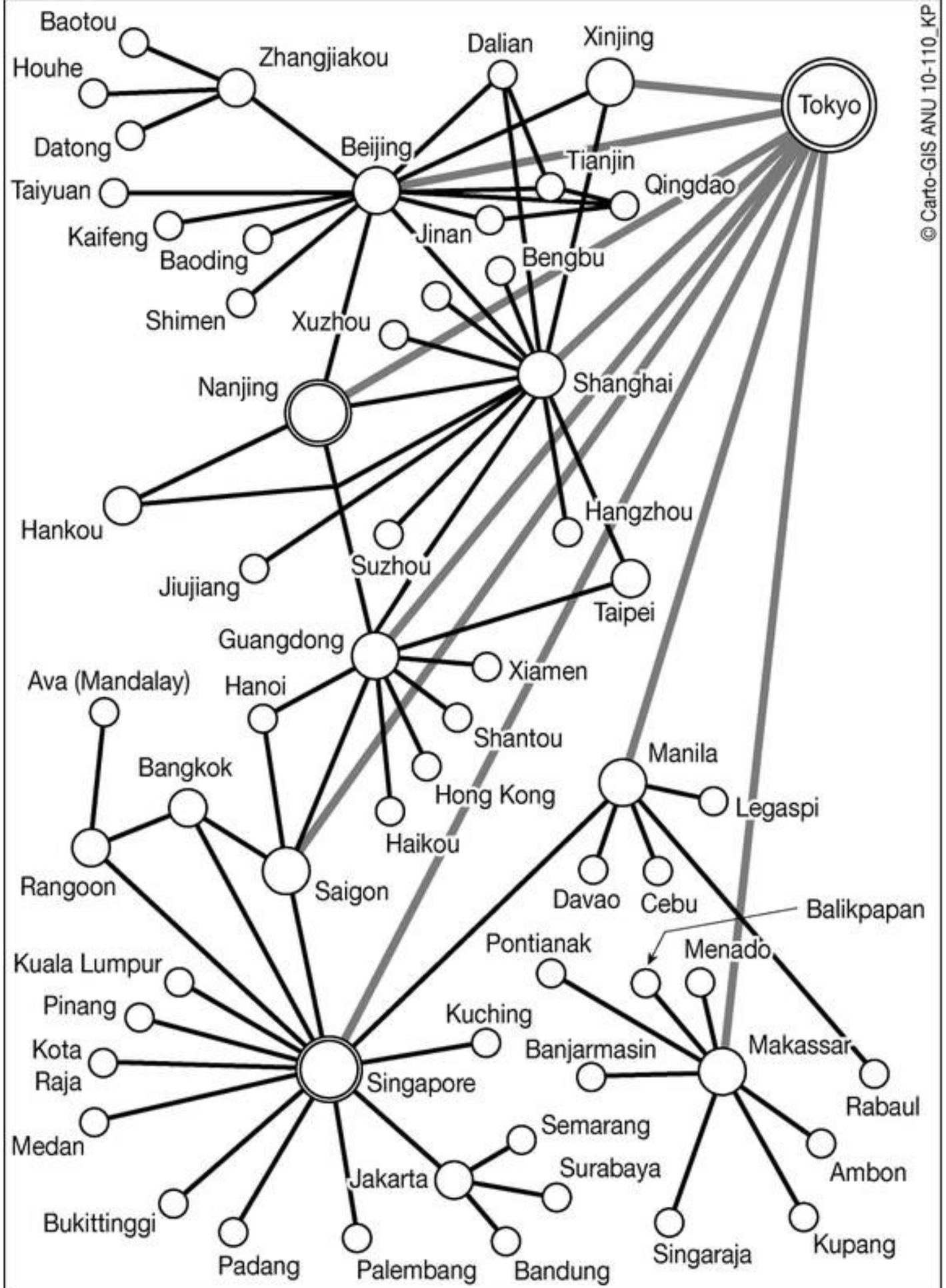


http://techpresident.com/news/wegov/24244/beyond-property-rights-thinking-about-moral-definitions-openness

http://schee.info

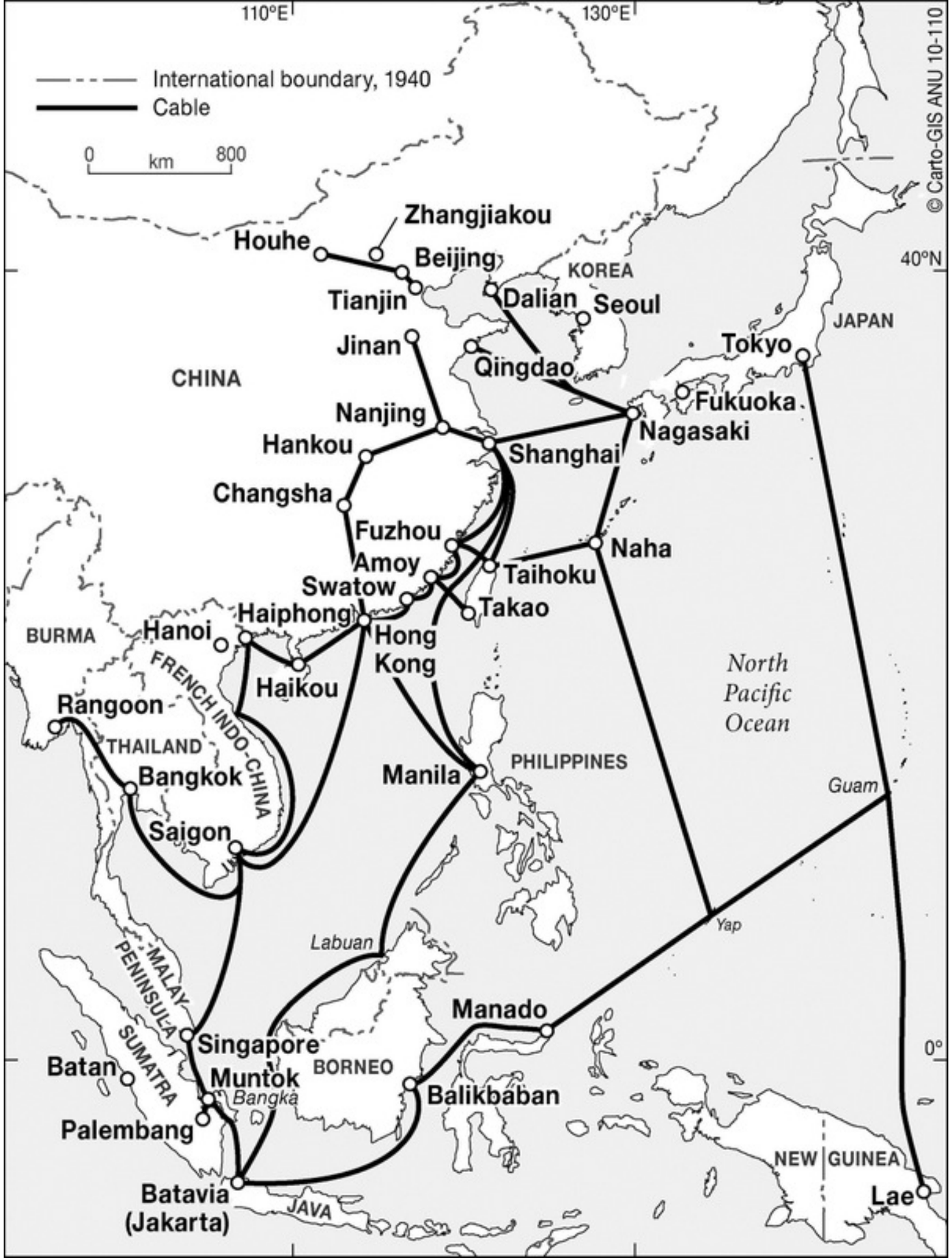
貳. 不缺什麼 缺如何

- 前瞻洞見和願景 foresight & vision
- 經濟體條件 constrains of economies
- 政策食譜 cookbook
- 治理機制 governing & steering
- 知識、資訊的開放 diffusion of knowledge & data
- 網絡途徑 networked approach



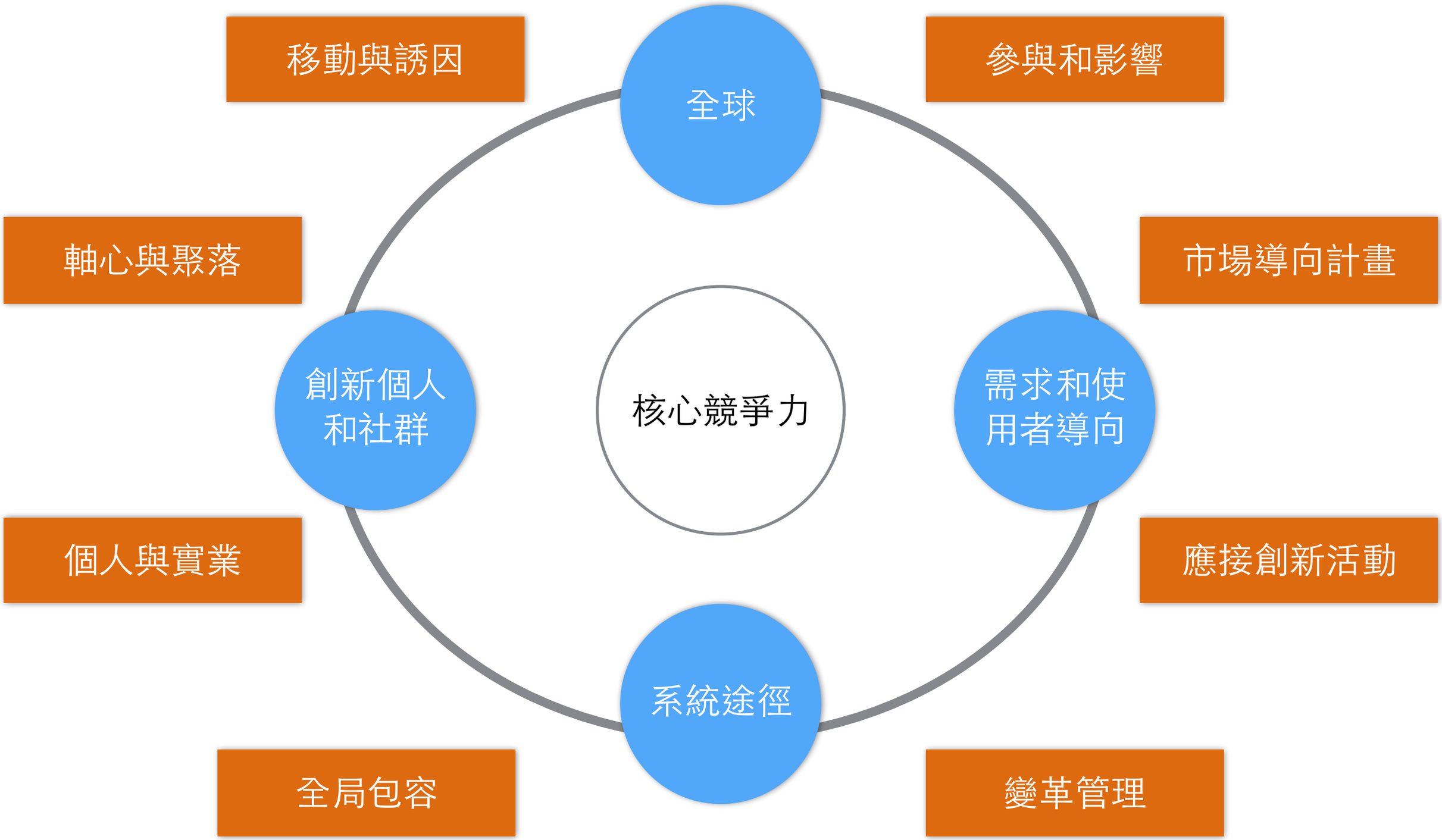
Tomoko Akami, **Japan's News Empire** and the Domei News Agency in Occupied Southeast Asia, 1942-1945

http://schee.info



Cable Network in Asia and Western Pacific, 1940

Source: Daniel R. Headrick, The Invisible Weapon: Telecommunication and International Politics, 1851–1945 (Oxford: Oxford University Press, 1991); Bernard Finn and Daqing Yang eds, Communications under the Seas: The Evolving Cable Network and Its Implications (London: The MIT Press, 2009); and various other sources.

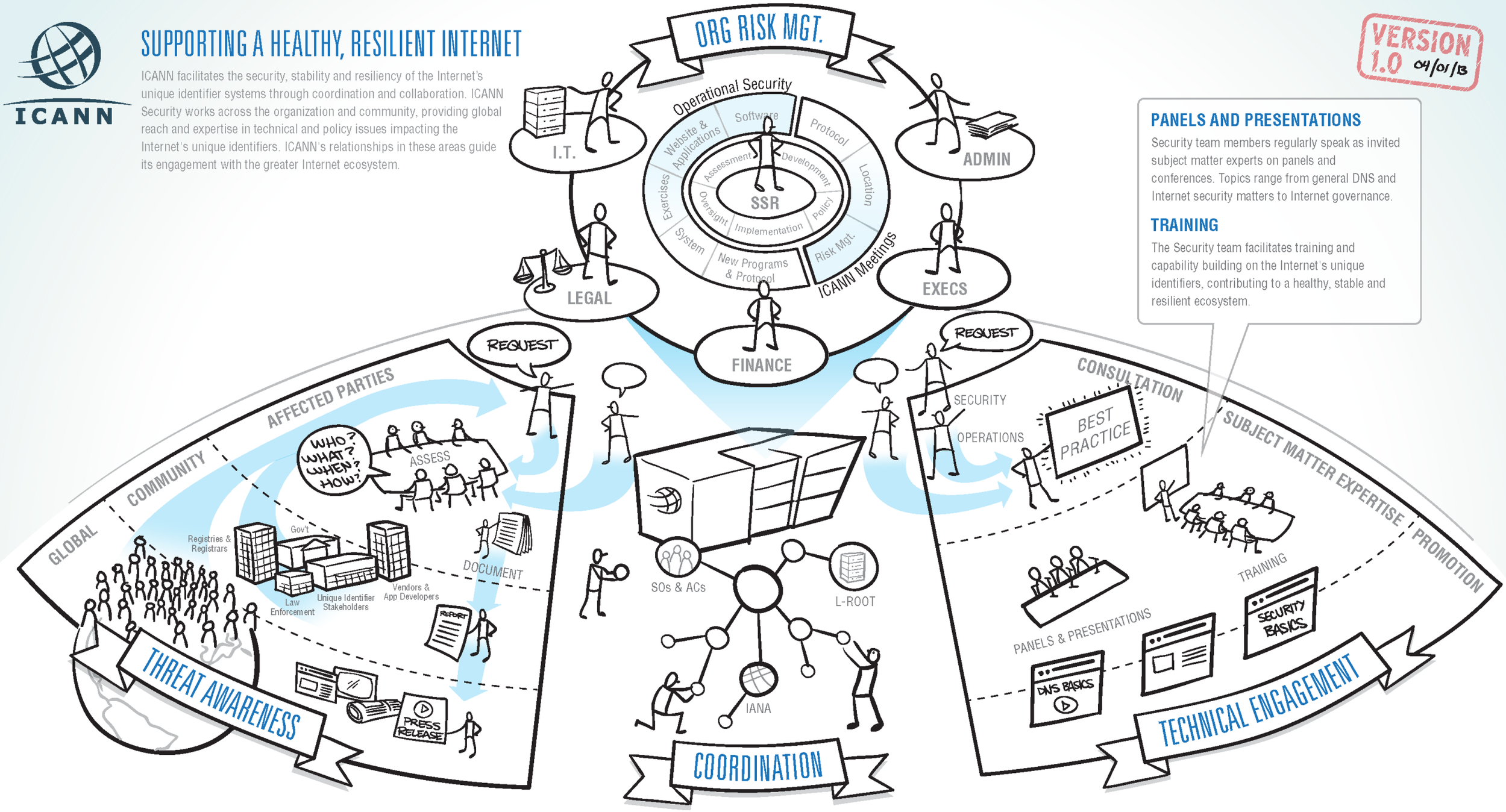


Redrawn from MEE Group 2008a

SUPPORTING A HEALTHY, RESILIENT INTERNET

ICANN facilitates the security, stability and resiliency of the Internet's unique identifier systems through coordination and collaboration. ICANN Security works across the organization and community, providing global reach and expertise in technical and policy issues impacting the Internet's unique identifiers. ICANN's relationships in these areas guide its engagement with the greater Internet ecosystem.

VERSION 1.0 04/01/13



PANELS AND PRESENTATIONS

Security team members regularly speak as invited subject matter experts on panels and conferences. Topics range from general DNS and Internet security matters to Internet governance.

TRAINING

The Security team facilitates training and capability building on the Internet's unique identifiers, contributing to a healthy, stable and resilient ecosystem.

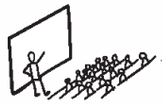
COORDINATE & COLLABORATE

The Security team is regularly invited to speak with community stakeholder groups, and facilitates activity with ICANN's Supporting Organizations and Advisory Committees.

PUBLICIZE & PROMOTE

WHITE PAPERS

The Security team provides thought leadership in the form of white papers, blog posts and the annual Security, Stability & Resiliency Framework for ICANN.



TALKS

Team members represent ICANN at various conferences and events worldwide, speaking on cybersecurity and governance, the Internet's unique identifiers and ICANN.

CONSULT & ADVISE

EXERCISES

POLICY

ROOT SERVER

The team contributes to scenarios for global cyber exercises, provides advice on operational practices such as with the root server community and DNS technical community.

REVIEW & COMMENT

POLICY

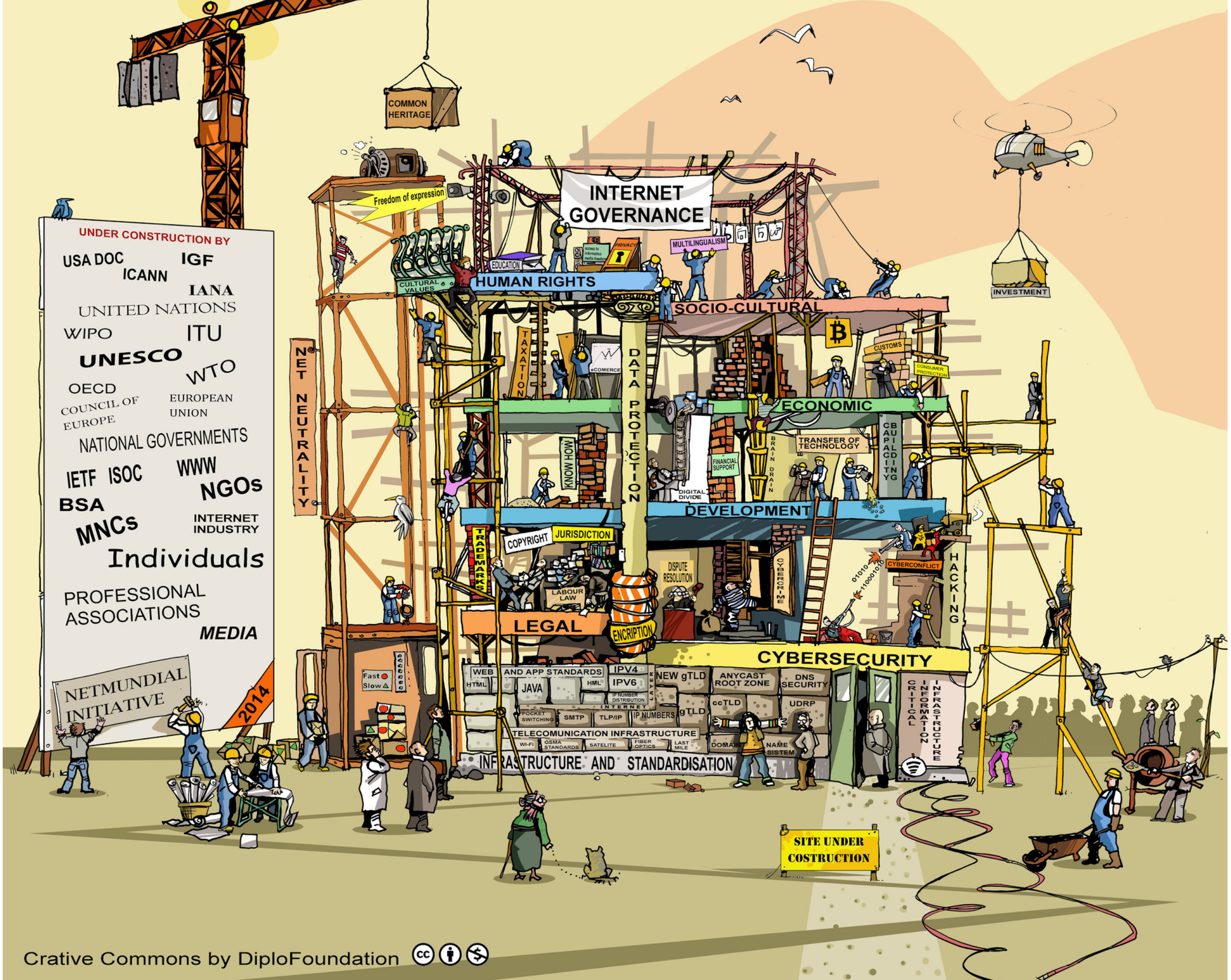
RFCs

The team regularly provides input into policy development processes, comments on protocols and open standards managed by others in the Internet ecosystem.

XPLANATIONS™ by XPLANE.com

http://schee.info

參. 不缺方向 缺層次



Crative Commons by DiploFoundation

UNCTAD: IG WG

資料庫欄位

- 報告編號 Number of issue in report
- 主事/主辦/地點 Actor/Host/Venue
- 名稱/機制說明 Name/Description of Mechanism
- 機制型態 Type of Mechanism
- 參與機制的功能 Function of Participation Mechanism
- 跨領域途徑 Inter-sectoral Approach
- 地區/國際範圍 Coverage Regional/international
- 可能斷層型態 Type of Possible Gap
- Possible Gap or Gap submitted to the Correspondence Group

http://unctad.org/meetings/en/SessionalDocuments/CSTD_2014_Mapping_InternetDatabase_en.pdf

2. 基礎和標準聚落

2.1. 電信基礎

2.2. 技術

2.3. 網路技術

2.4. IP Number

2.5. DNS

2.6. Root zone

2.7. 網路中立性

2.8. 雲端運算

2.9. 數位匯流

2.10. IoT

3. 安全聚落

3.1. 網路安全

3.2. 網路犯罪

3.3. 關鍵資訊架構

3.4. 網路衝突

3.5. 兒少網安

3.6. 加密

3.7. 垃圾郵件

3.8. 電子簽章

4. 人權聚落

4.1. 言論自由

4.2. 隱私與資料保護

4.3. 身心障礙者的網路近用

4.4. 女性網路權益

4.5. 其他人權議題

5. 法律聚落

5.1. 管轄權

5.2. 仲裁

5.3. 著作權

5.4. 商標

5.5. 勞動法

5.6. 中介機構

6. 商務聚落

6.1. 電子商務

6.2. 電子貨幣/虛擬貨幣

6.3. 消費者權益保護

6.4. 稅務

7. 國際發展聚落

7.1. 寬頻近用

7.2. 數位落差

7.3. 培力發展

7.4. 其他發展議題

8. 社會文化聚落

8.1. 內容政策

8.2. 文化多樣性

8.3. 多語

8.4. 線上教育

8.5. 全球公益

Why do **US** Internet companies dominate in **layer 3**?

How did **East Asia** (Japan, Korea, Taiwan and China) become so strong in **layer 1**?

Fransman (2010-03-01). The New ICT Ecosystem (Kindle Locations 3575-3576). Cambridge University Press. Kindle Edition

DH Open Data Strategy

HMT Open Data Strategy

MOJ Open Data Strategy

MOD Open Data Strategy

HMRC Open Data Strategy

FCO Open Data Strategy

DECC Open Data Strategy

Home Office Open Data Strategy

DfID Open Data Strategy

DfE Open Data Strategy

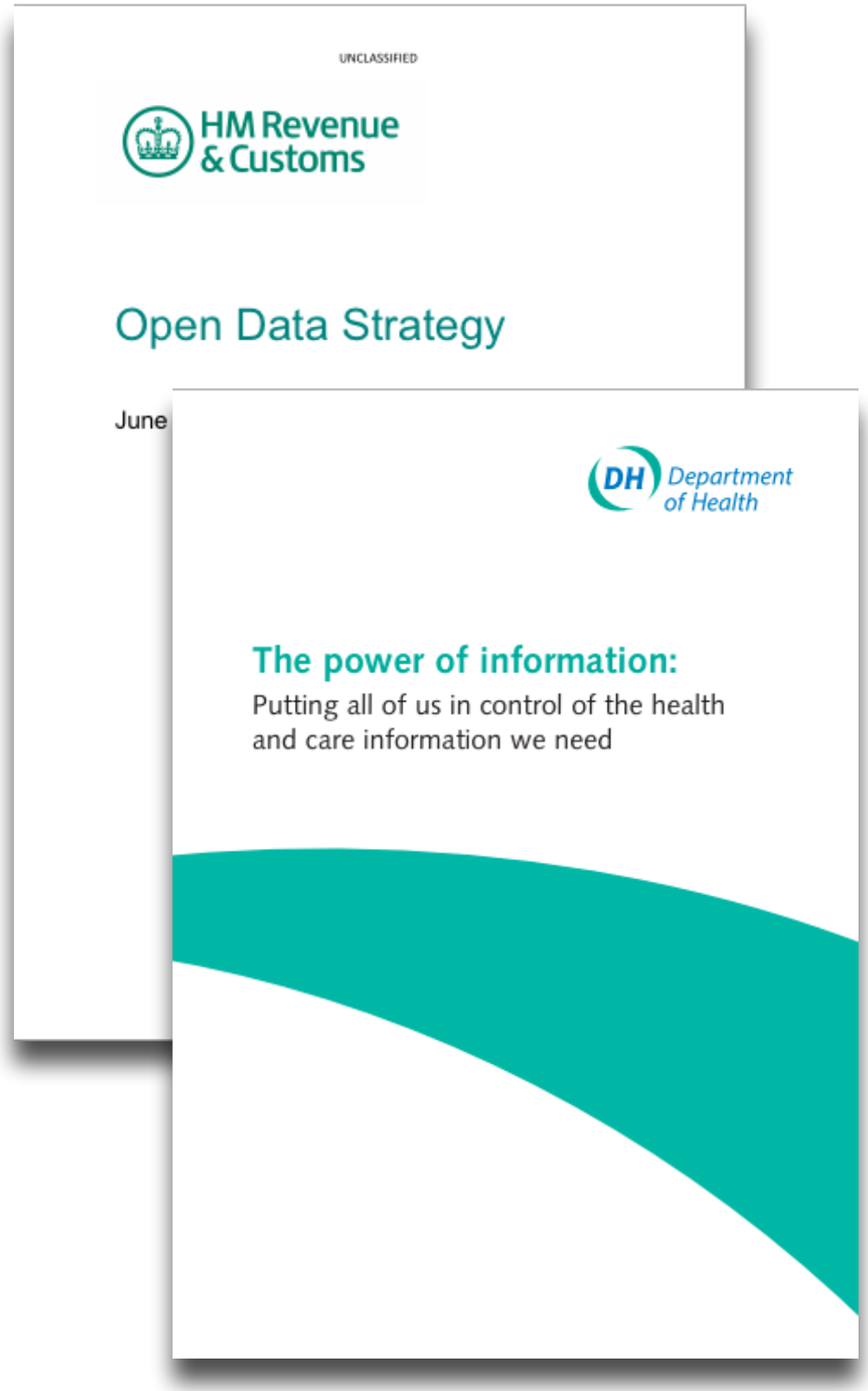
DWP Open Data Strategy

DCLG Open Data Strategy

Cabinet Office Open Data Strategy

BIS Open Data Strategy

data.gov.uk/open-data-strategies



肆. 不缺應用 缺介面

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www.ntpc.gov.tw

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台北市中正區中山南路1號

建物/網站 buildings, applications

道路/網絡 roads, utilities, networks

區位/拓樸 zoning, topologies

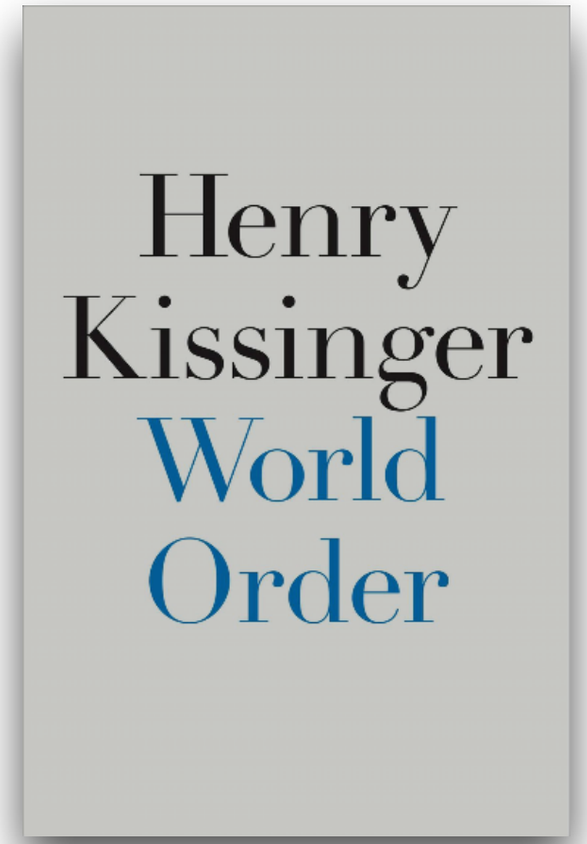
法律/源碼 codes

社區/網絡 social networks

設計 design

認同/識別 identity, URI

城市願景	Vision
市民住民	People
公共生態	Ecosystem
軟性基礎建設	Software
城市維運系統	Systems
硬體基礎建設	Hardware



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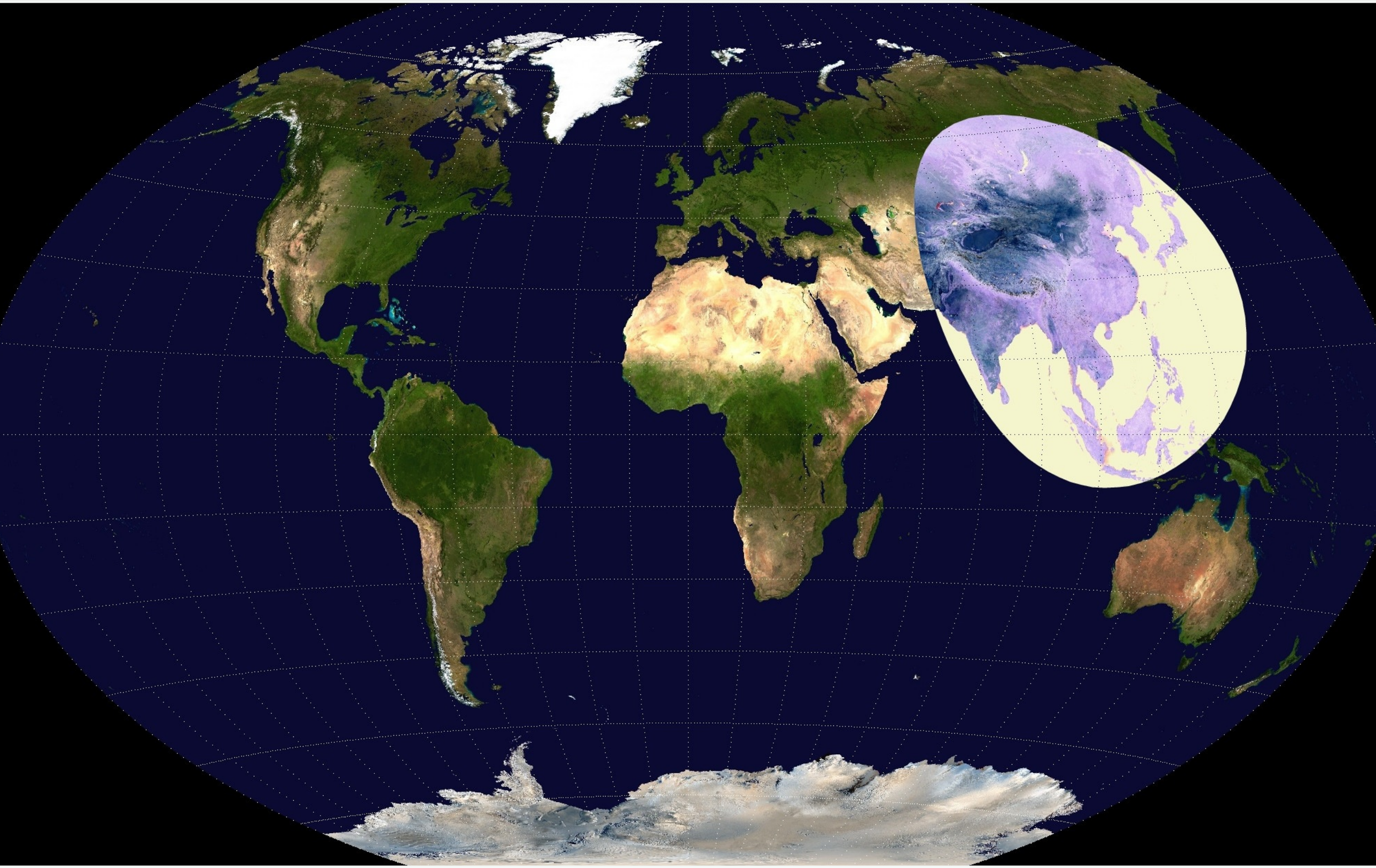
.paris SFO dot HAMBURG

2013~

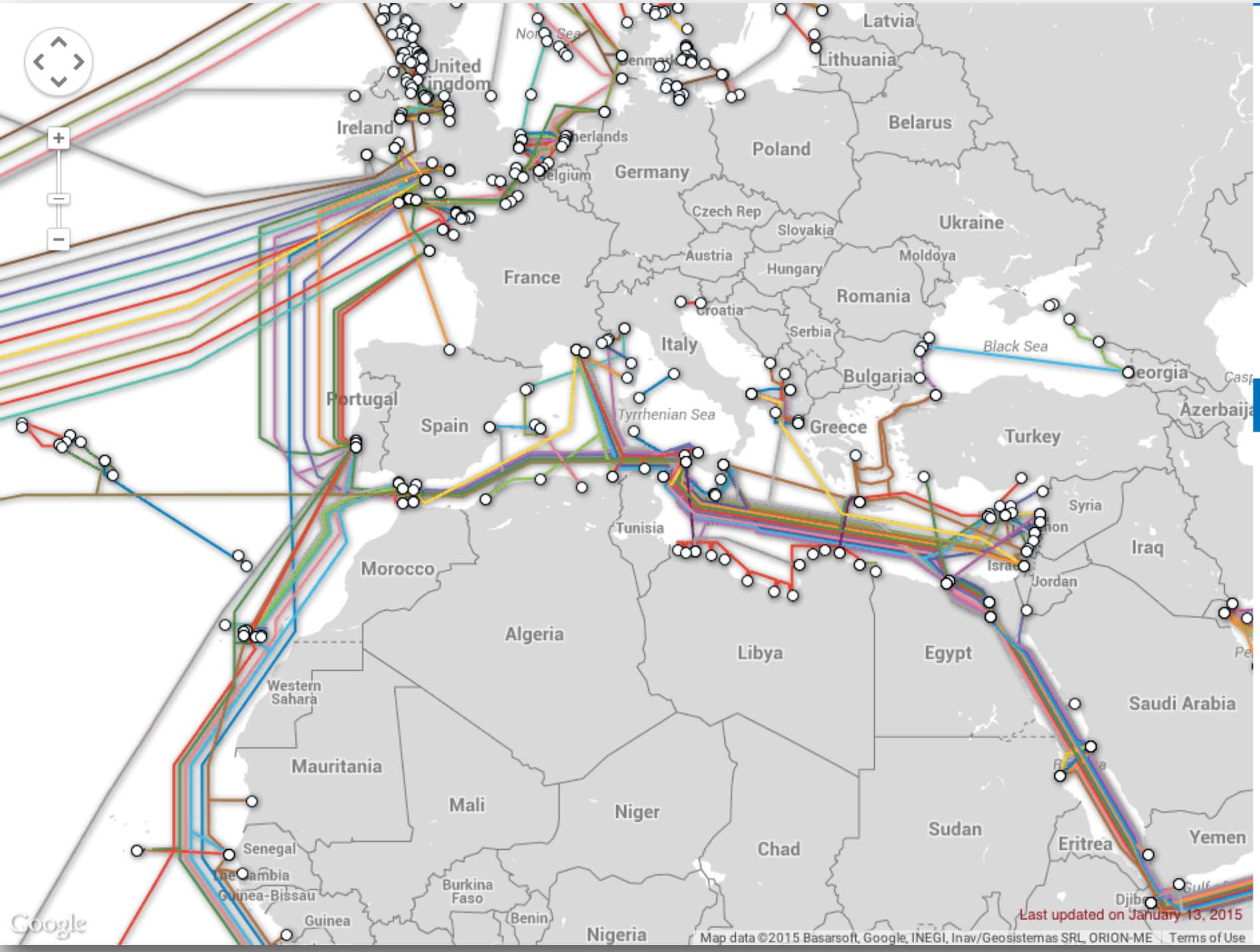
http://schee.info

伍. 不缺趨勢 缺市場感



http://i.imgur.com/MWnlkbo.jpg

http://schee.info



TeleGeography

Submarine Cable Map

The Submarine Cable Map is a free resource from TeleGeography. Data contained in this map is drawn from the Global Bandwidth Research Service and is updated on a regular basis.

To learn more about TeleGeography or this map please click here.

HUAWEI MARINE NETWORKS

Sponsored in part by Huawei Marine

Feedback github

Search

Submarine Cables

ACS Alaska-Oregon Network (AKORN)
Aden-Djibouti
Adria-1
Africa Coast to Europe (ACE)
ALASIA
Alaska United East
Alaska United Southeast
Alaska United Turnagain Arm (AUTA)
Alaska United West
ALBA-1
Aletar
Alonso de Ojeda
ALPAL-2
America Europe Connect (AEC)
America Movil Submarine Cable System-1 (AMX-1)
American Samoa-Hawaii (ASH)
Americas-I North

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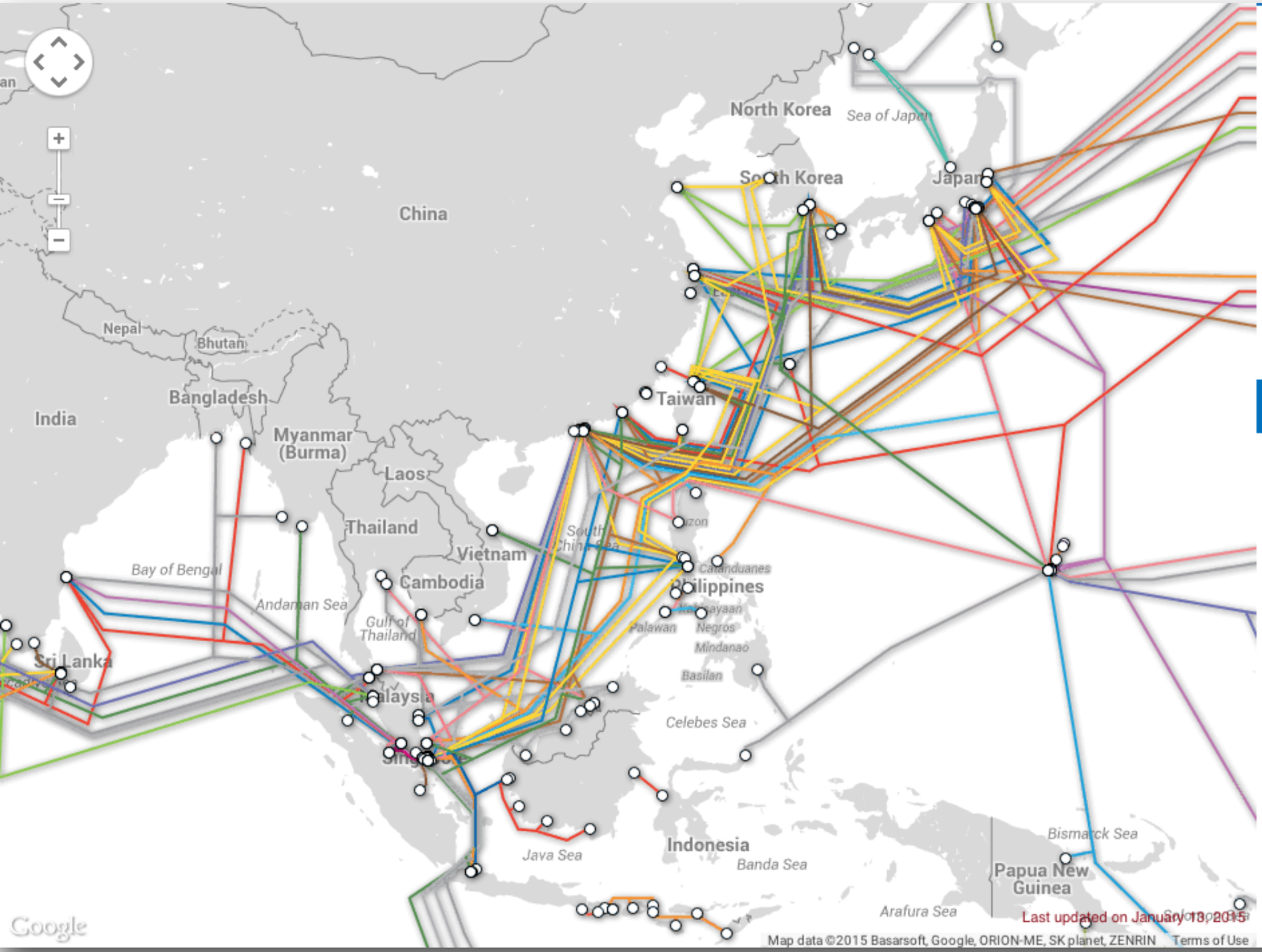

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Submarine Cables

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Alaska United Southeast
Alaska United Turnagain Arm (AUTA)
Alaska United West
ALBA-1
Aletar
Alonso de Ojeda
ALPAL-2
America Europe Connect (AEC)
America Movil Submarine Cable System-1 (AMX-1)
American Samoa-Hawaii (ASH)
Americas-I North

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Think Like a Data Journalist: How the Guardian Turns Data into Stories Every Day - Simon Rogers and Feilding Cage

This hands-on session will show how a dataset turns into a story, the narrative process the Guardian's team goes through, the tools used and the lessons learned.

http://strataconf.org

Putting Big Data to Work in Retail - Increasing Margins, Avoiding Food Waste - Jan Karstens and Johanna Fleckner

For food retailers the fresh food category is important for customer satisfaction. Providing sufficient stocks while avoiding food waste makes for customers happy and keeps the retailer profitable. This case study shows how a fully automated, data-driven replenishment process is possible based on internal and external data sources combined with advanced predictive analytics.

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check their children's grades, home
progress online.

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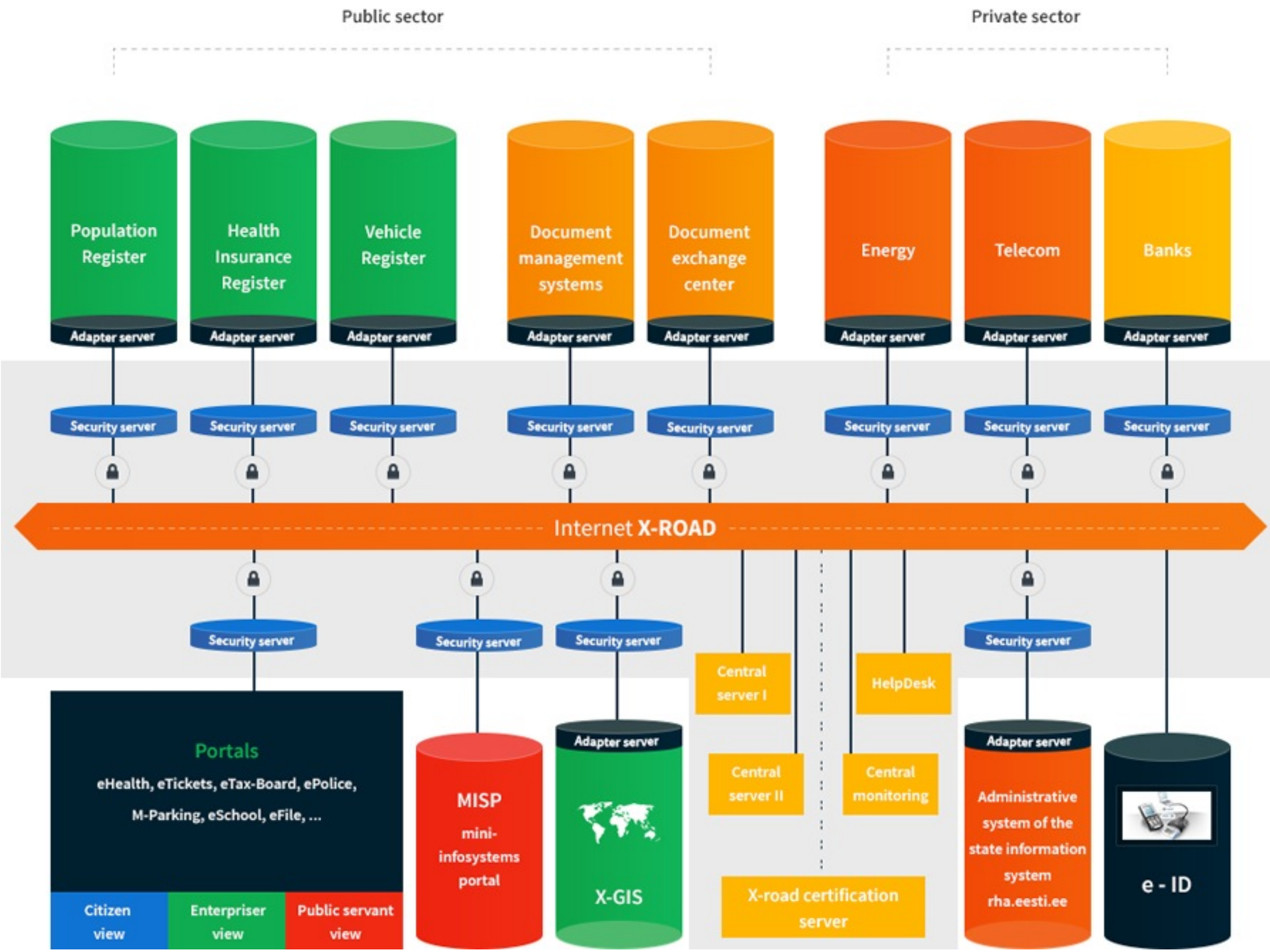


https://www.ria.ee/publications/

http://schee.info

DigiDoc

DigiDoc is a system that's widely-used in Estonia for storing, sharing and digitally signing documents.

Digital Signature

Digital signature enables secure, legally-binding, electronic document signing

e-Business Register

Enables entrepreneurs to register their new business online in minutes

e-Cabinet

A powerful tool used by the Estonian government to streamline its decision-making process

e-Law

Allows public access to every piece of draft law that has been submitted since February 2003

e-Police

Revolutionizes police communication and coordination, maximizing effective policing.

e-Prescription

A centralized, paperless system for issuing and handling medical prescriptions

e-School

Allow students, teachers and parents to collaborate in the learning process

e-Tax

e-Tax has drastically reduced the time spent by individuals and entrepreneurs on filing taxes

Electronic Health Record

Integrates data from healthcare providers into a national record for each patient

Electronic ID Card

e-ID acts as definitive proof of ID in secure electronic environments

Electronic Land Register

A one-of-a-kind information system for storing real estate and land data

i-Voting

i-Voting allows voters to cast their ballots over the internet, from anywhere in the world

Location-Based Services

A positioning service that detects device location & provides location information

m-Parking

Allows drivers to pay for city parking using a mobile phone

Mobile-ID

Allows a client to use a

Mobile Payment

Enables payment for goods

Population Register

The state database for basic

Smart Grid in Energy Sector

Estonian-developed

Social Welfare e-Services

The social welfare benefit

計畫的概念？

電子居民的概念是核發給非愛沙尼亞居民的電子身分證(identification card)。電子身分證約略等同於身分證，是一張塑膠製的晶片卡，能儲存生物資訊，例如指紋和視網膜特徵，但並不留存本人相片。這張晶片卡能提供電子身分證擁有者使用愛沙尼亞境內的各種電子服務。電子身分證是申請制，而並非在憲法層次所提供的身分識別和保障。所以擁有者不要以為就可以拿到這張卡就可以自由出入愛沙尼亞邊境，享受國民的各種權利（例如投票）。

陸. 不缺產值 缺價值捕獲

Value Creation and Capture in Global Value Chains

“林一平表示，擁有全國巨量資料部會，包括財政部財稅資料中心、衛福部國民健康署、交通部運研所、內政部警政署，及金管會聯徵中心等，科技部利用國網中心介入，以去識別化供研究，暫不作商業營利用途。”

http://www.chinatimes.com/newspapers/20150105000012-260202

THE FRAMEWORK PROGRAMME FOR RESEARCH AND INNOVATION

HORIZON 2020

1. Improve the economy
2. Develop the next generation of technologies
3. Resolve real-world end user limitations
4. Improving the marketplace

瑞典：零傷亡願景倡議

交通系統通常都把安全責任放在道路使用者身上,

零傷亡願景倡議把這一責任放在「系統設計」上。

http://v0.taipei.io

1. 基礎設施

零傷亡願景涉及規劃、設計和建造道路與基礎設施，以便提高安全性，減少致命事故。必須在規劃新的基礎設施項目時，將安全因素植入並納入系統。

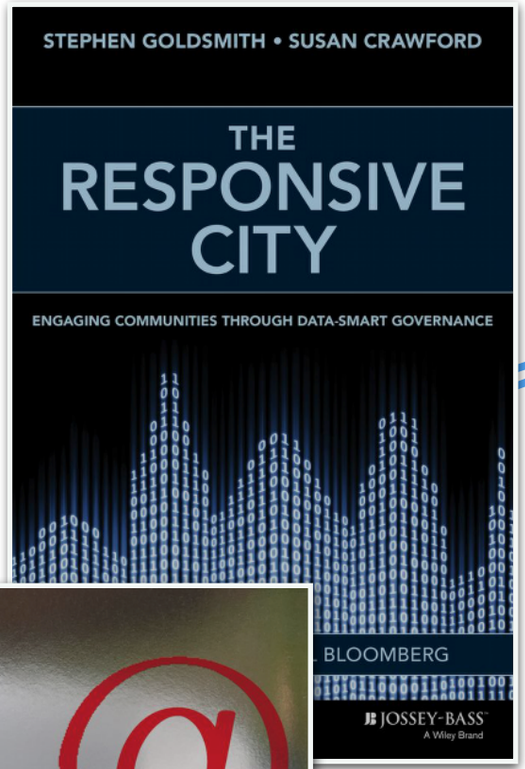
- 高容量道路
- 工程師
- 顧問
- 環境保護
- 建築師
- 交通安全
- 較低成本
- 挽救生命
- 交工單位

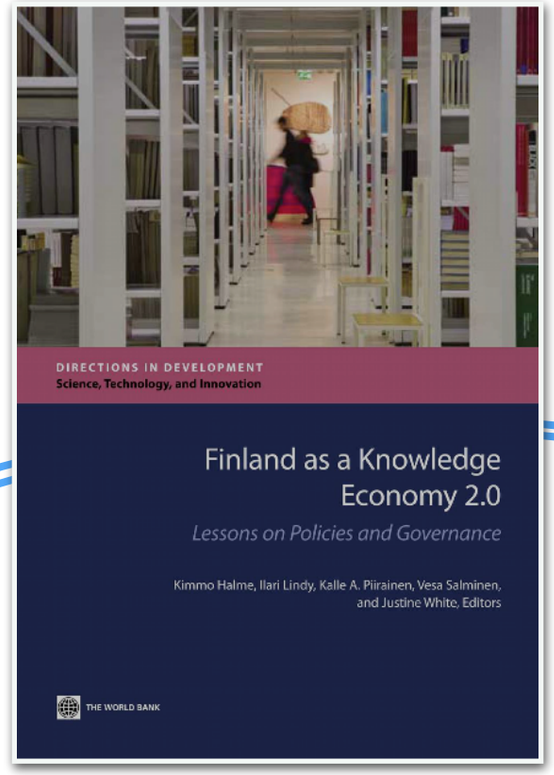
2. 控制與監理

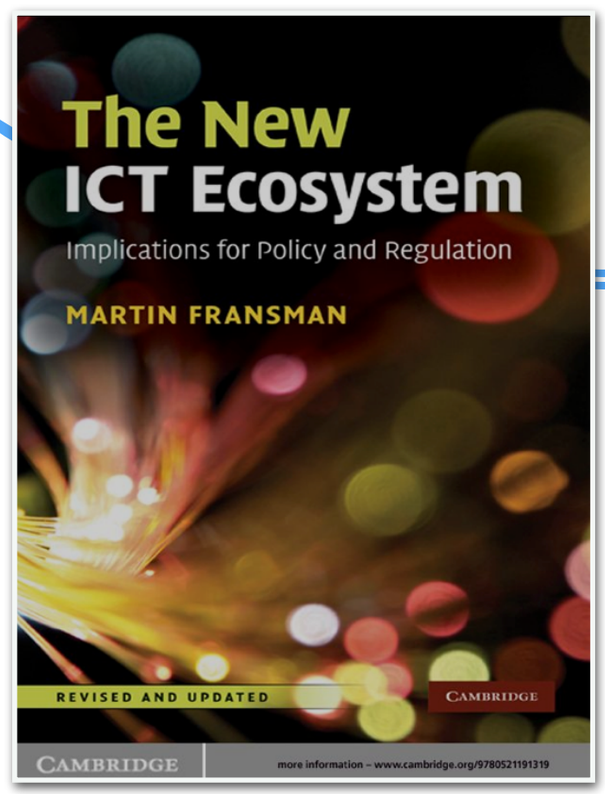
道路交通控制和監視可包括監控交通流量和天氣狀況的系統，或其他符合智能交通系統條件的措施。

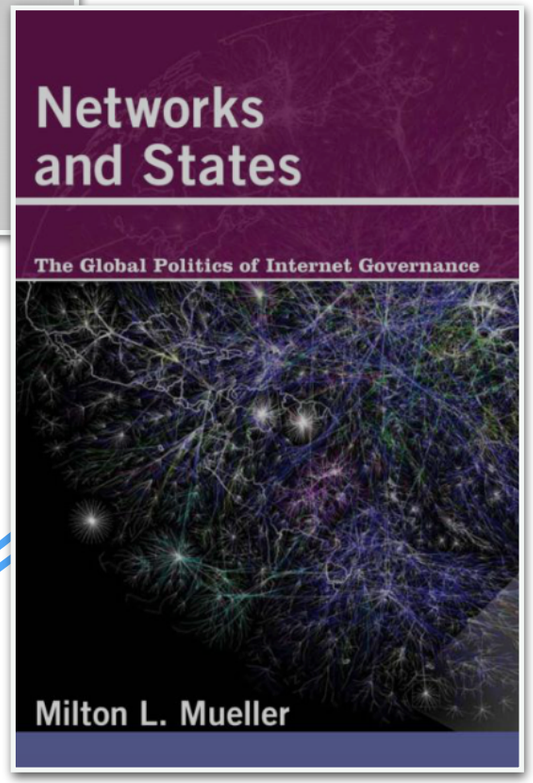
- 監控系統
- 交通流量維護
- 交通資訊評估
- 評估系統
- 可延展的解決方案
- 天氣因素控制
- 資訊處理
- 智慧交通系統
- 系統整合

柒. 北極星還是北斗七星









http://schee.info

問題？
info@motomosa.com