



## DNSSEC Deployment in Taiwan

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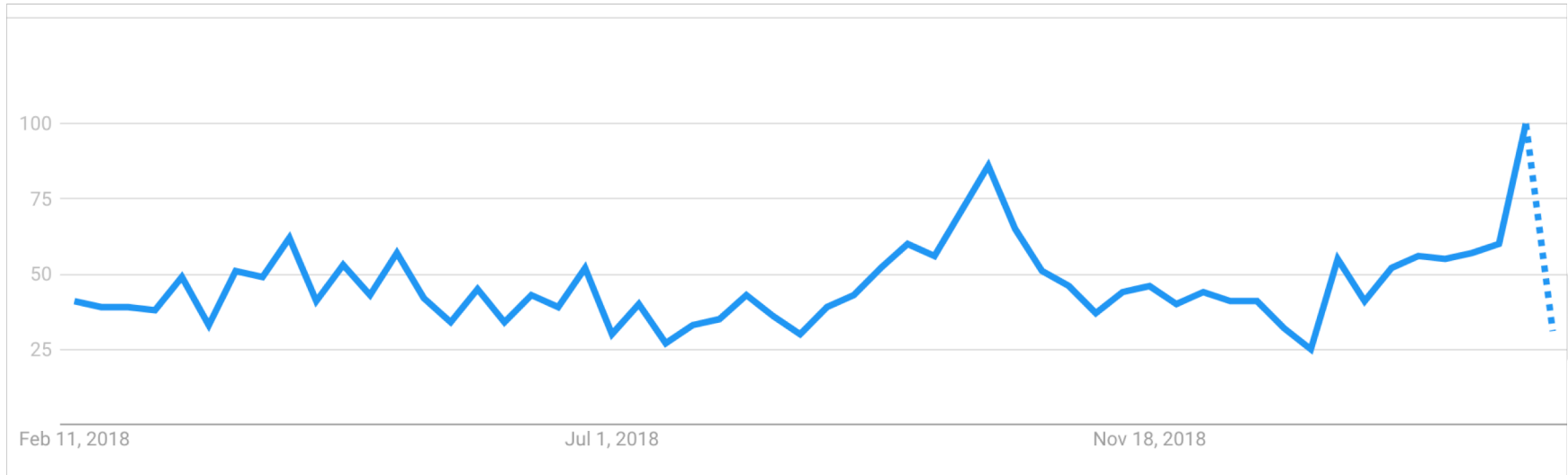
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CEO, Taiwan Network Information Centre

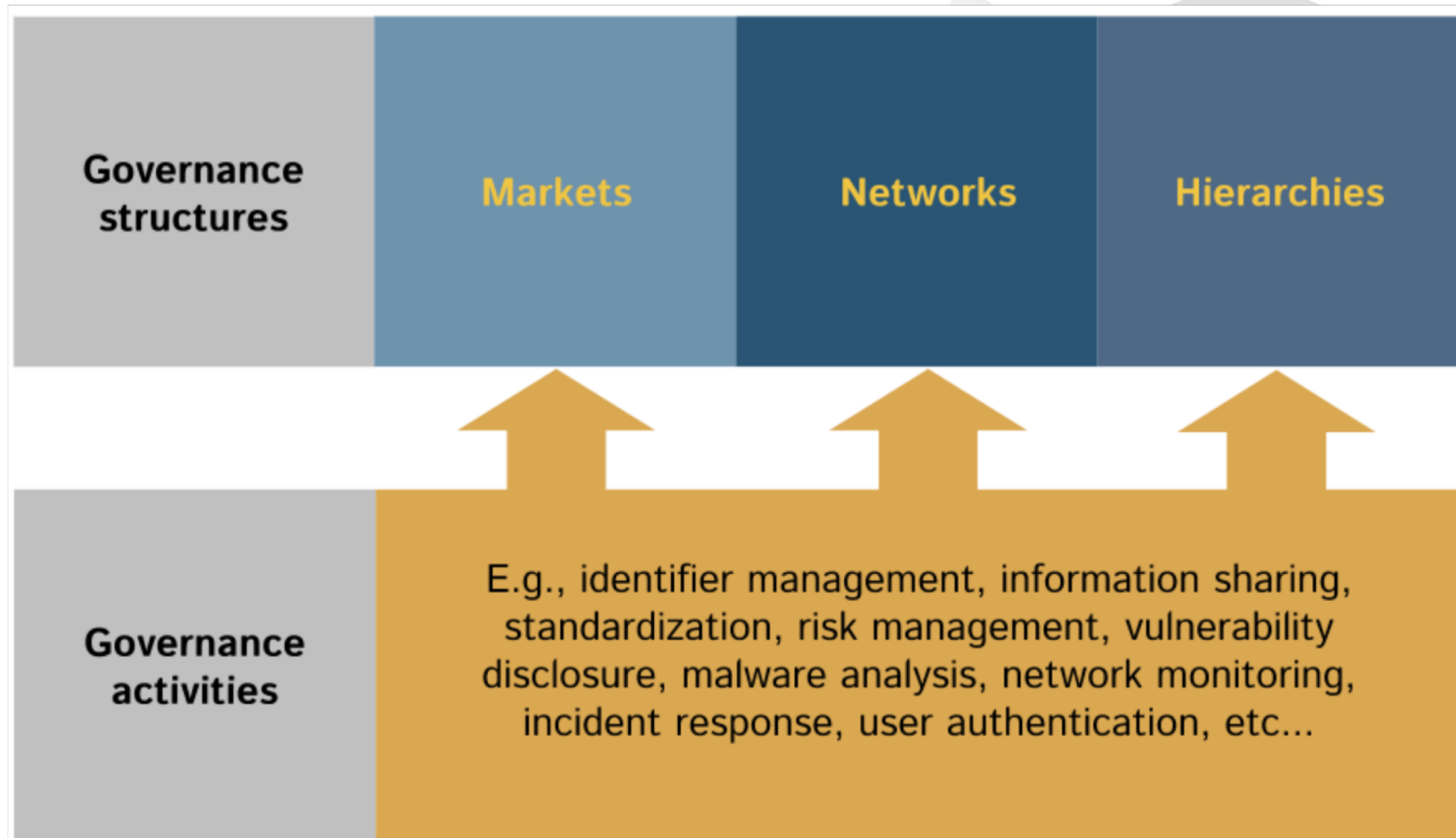
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# Trend for DNSSEC



# Internet Ecosystem Governance Structure and Activities



Type	Case	Description	Governance Structure		
			Market	Networked	Hierarchy
Ex Ante	Secured Internet Identifiers	DNSSEC: Securing DNS resolution to ensure information authenticity and integrity	Weak demand for secure DNS resolution	DNSEXT WG in IETF develops DNSSEC standards, technical community push for adoption at ICANN.	Taiwan govt agencies support development of DNSSEC. TWNIC develops .tw signing process. TWNIC registrar contract doesn't require DNSSEC implementation.

# TWNIC Registrars



協志聯合科技股份有限公司

IPv6



亞太電信股份有限公司

IPv6 DNSSEC



中華電信股份有限公司  
數據通信分公司

IPv6 DNSSEC



台灣固網股份有限公司

IPv6 DNSSEC



Neustar, Inc.

IPv6 DNSSEC



馬來西亞商崑勝  
網路服務股份有限公司  
台灣分公司

IPv6



網路中文資訊股份有限公司

IPv6



網路家庭國際資訊  
股份有限公司

IPv6 DNSSEC



新世紀資通股份有限公司

IPv6 DNSSEC



IP Mirror Pte. Ltd.

IPv6



中華國際通訊網路  
股份有限公司

IPv6 DNSSEC



GANDI SAS

IPv6



捕夢網數位科技有限公司

IPv6



Topnets Group Limited

# .TW DNSSEC Statistics

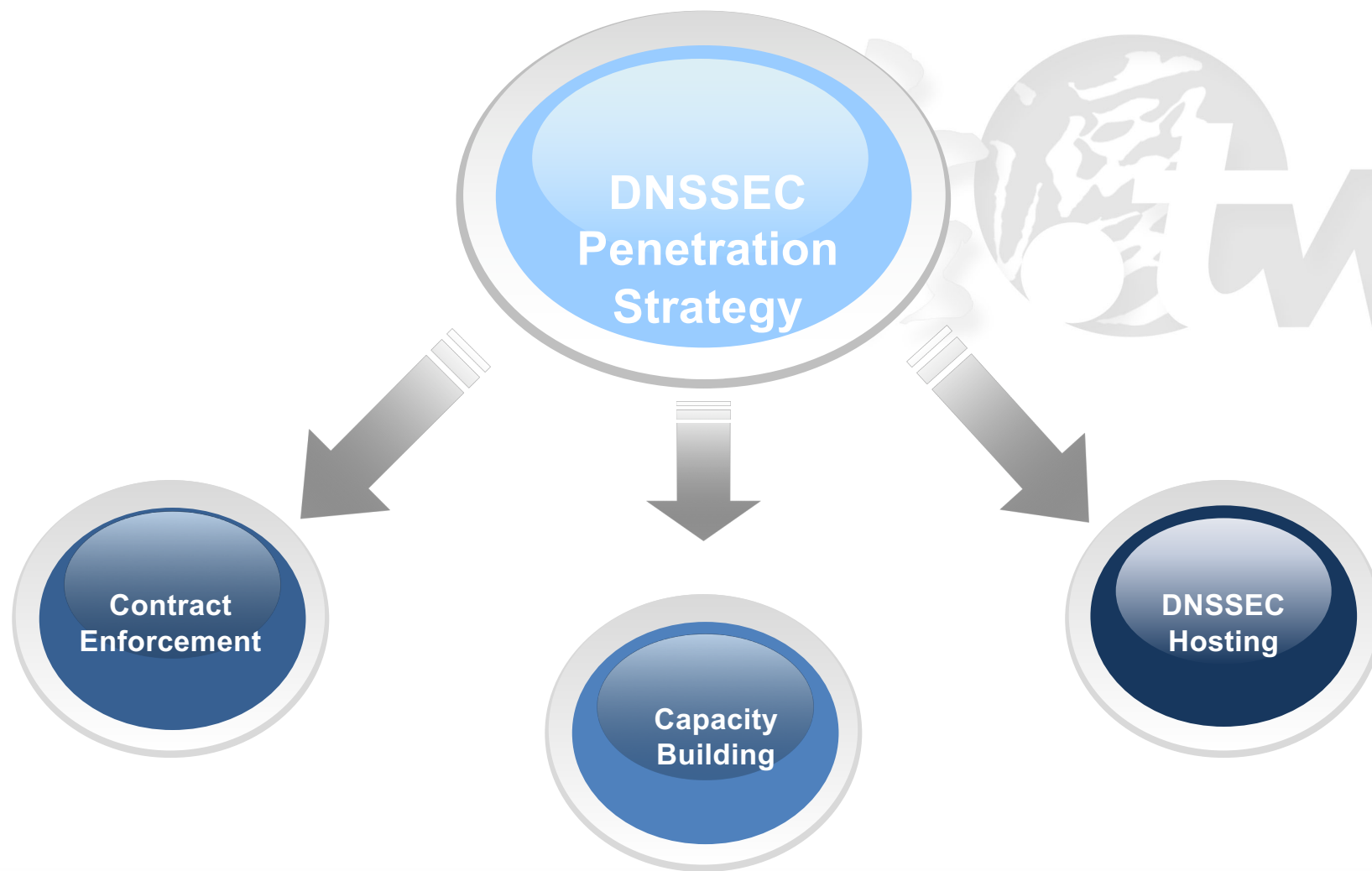
SLD	DUM	DNSSEC enabled
com.tw	219,347	117 (0%)
org.tw	11,178	15 (0.1%)
net.tw	1,335	4 (0.3%)
gov.tw	2,162	75 (0.3%)
edu.tw	332	34 (10.2%)
ebiz.tw	63	1 (1.6%)
game.tw	175	1 (0.6%)
club.tw	200	1 (0.5%)
.tw	4,182,130	212 (0%)

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# Operational Feedback

- ◆ DNSSEC authenticates DNS information, which blocks DNS poisoning. DNS poisoning is the easy way to do a MiTM attack. DNSSEC makes things harder for the attacker.
- ◆ Getting guarantees about the mapping of a name to a given IP address does not get you far if you cannot know whether a given packet really comes from the IP address which is written in its header.
- ◆ DNSSEC does not provide much added value *to the big servers*, and that explain their reluctance.
- ◆ People are reluctant to mess with their DNS setup because DNSSEC is new. If your DNSSEC deployment goes wrong you could loose your entire internet presence.

# Way Forward







*Thank  
You*