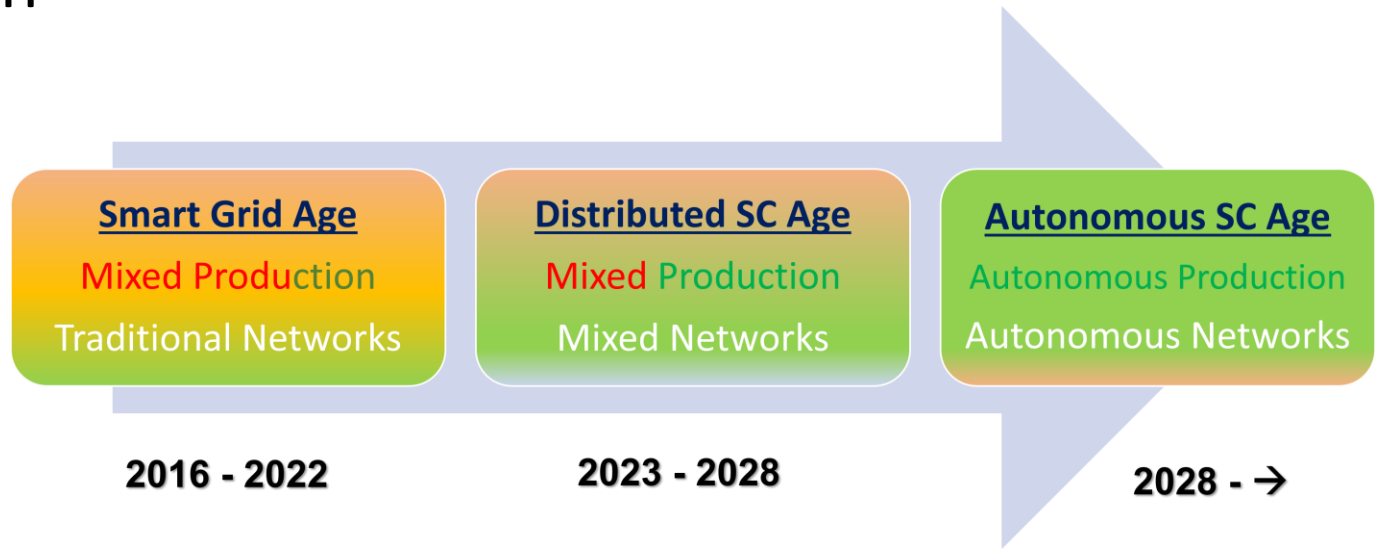
NEW STREAMS IN THE GRID
Data Streams

Speaker : ***Yosi Shneck****, Executive consultant, IEC*

The paradigm Change

- Digitalized Grids – Electricity, Communication, Information
- Electricity -----> Information
- Highly distributed
- Multiplayers
- **DATA STREAMS**



The DAL Challenge

- Consumers, Prosumers
- Smart meters, DER devices, Microgrids
- Aggregators, Grid operators, Regulative entities, Markets
- Communication, Cloud, System providers, Service providers

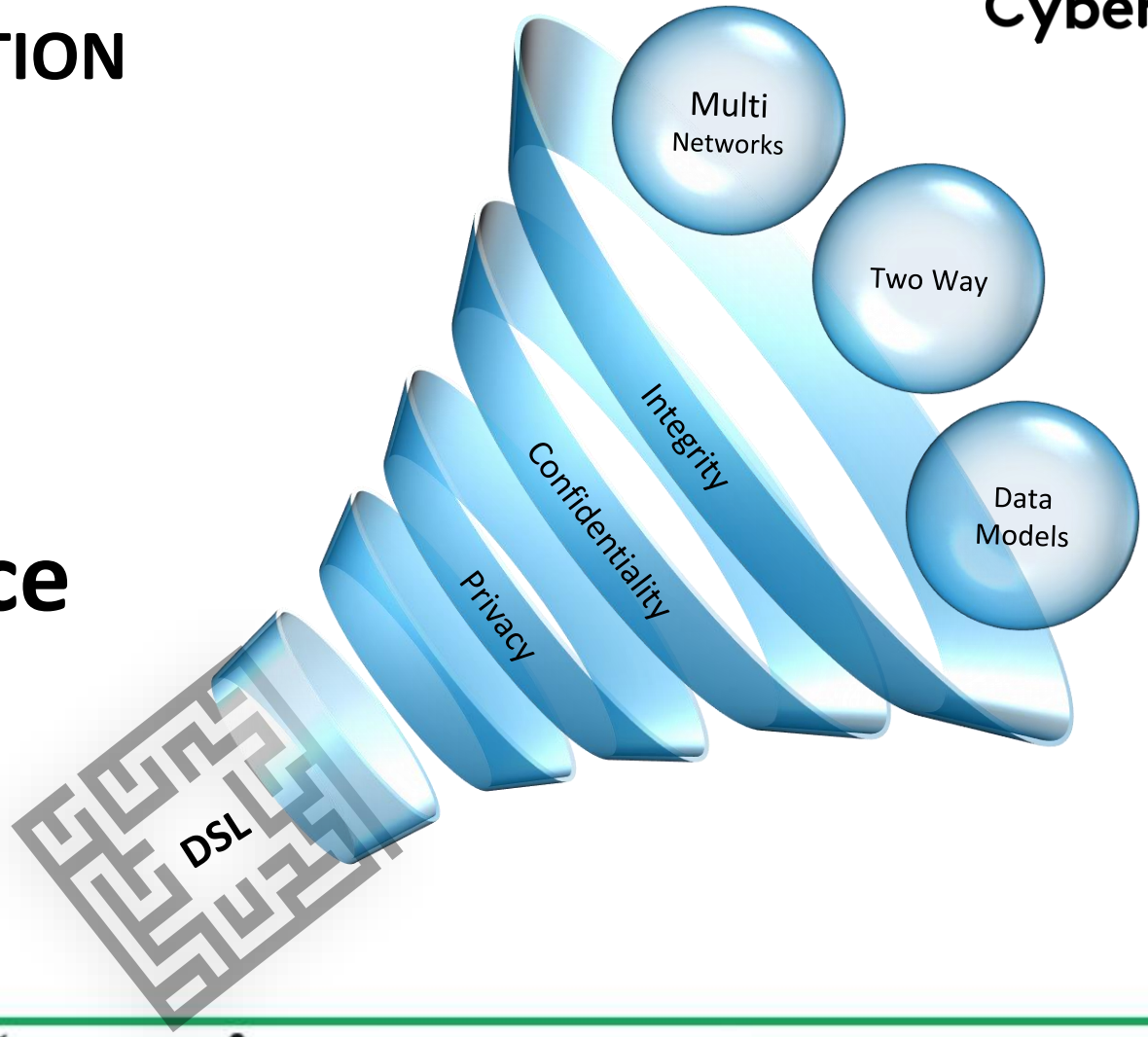
- DSL – Data Streams Labyrinth

The main **HIGHWAY**!

Cyber Attack Surface

- Dealing with **INFORMATION**
  - Integrity
  - Confidentiality
  - Privacy
  - ……

Cyber Attack Surface



So what is wrong with the DSL?

Labyrinth & Facts

"A complicated irregular network of passages or paths in which it is difficult to find one's way"

- Where are my data streams?

What are the consequences?

- Not part of our risk assessment
- Not part of our mitigation steps
  - No SIEM/Firewall rules
  - No SOC monitoring
  - NO ……
- Not part of our concern
- Simply, not protected

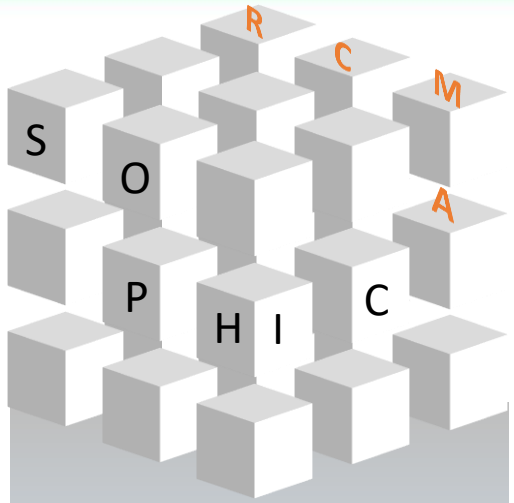
CYBER ADVERSARIES ARE CRAZY ABOUT THEM

Cracking the DSL cyber challenge

The 3 vertex Israel Electric SOPHIC™ DSL model

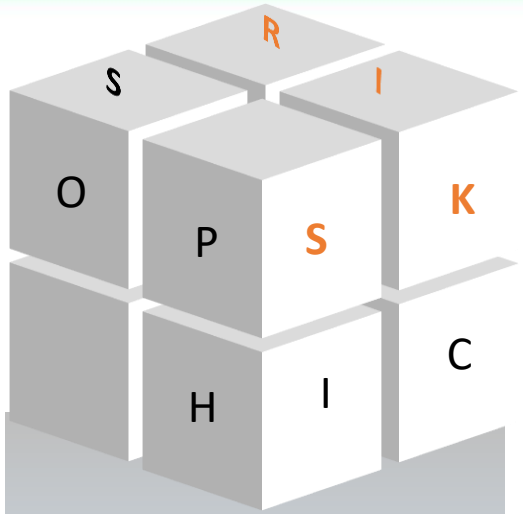
- **KNOW YOURSELF** – Maturity and Abilities Assessments
  - **CYBER RISK** assessment
    - **VALIDATION**

The three SOPHIC™ Vertexes



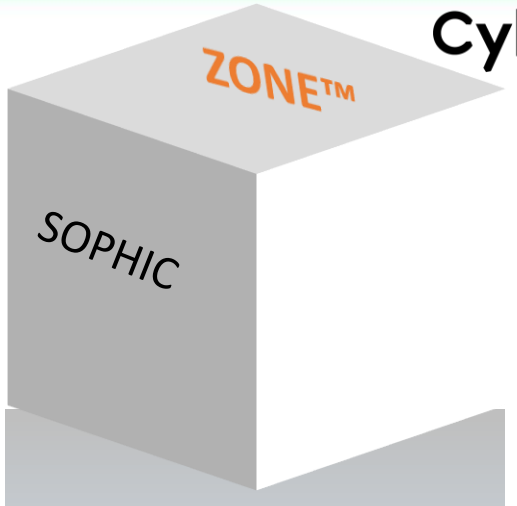
Know Yourself

- Set of assessments and mappings
- Maturity, IoT/IIoT, Cyber Organization
- Data Stream as asset
- **Continuous!**



Risk Assessment

- Cyber everywhere
- "Easy Critical"
- **Continuous**!



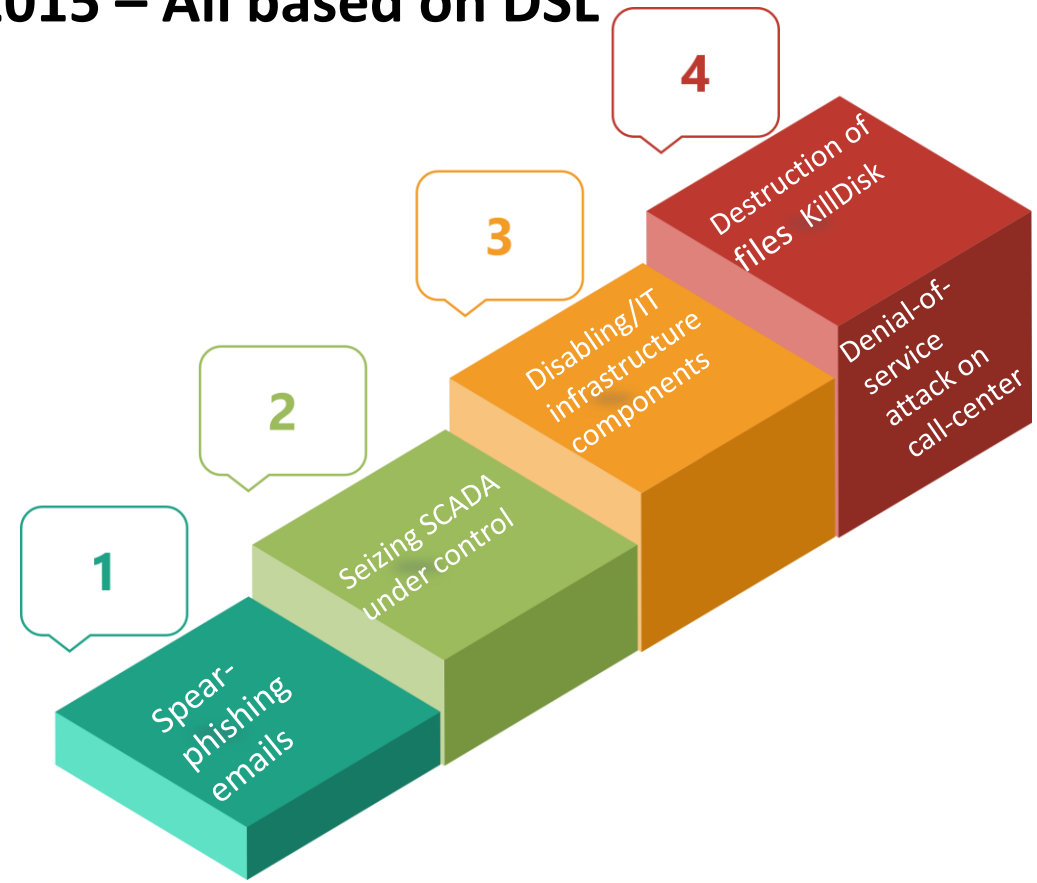
Validation Ability

- Test Bed?
- Any Change
- Hardware, Software, Firmware, Policy, Procedures

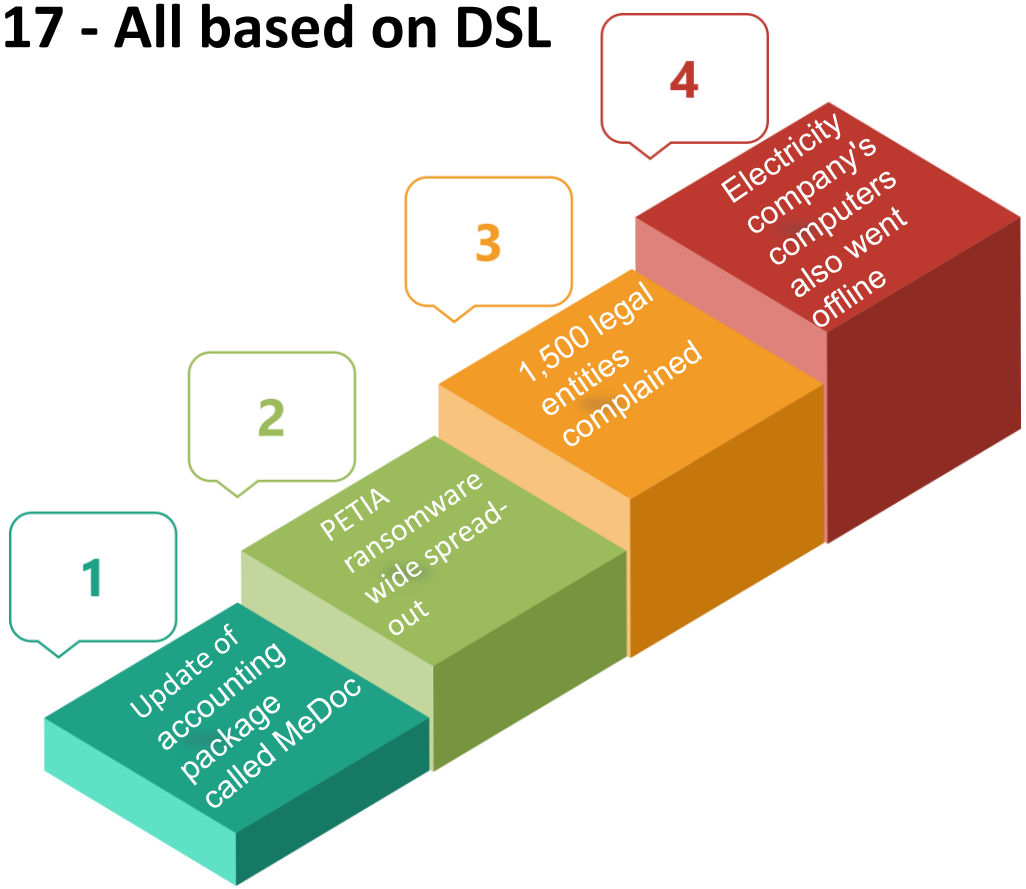
Ukraine as use case

CybergymIEC

2015 – All based on DSL



2017 - All based on DSL



Key Takeaways/ Recommendations

- Cyber Everywhere
- Know Yourself
- Manage the data streams as an asset
- Don’t look for cyber risk just below the streetlight!

REMEMBER:

You May Not Be Interested in Cyber, But Cyber Is Interested in You”

Thank You

For discussions/suggestions/queries email: www.indiasmartgrid.org
www.isgw.in

https://www.cybergymiec.com
sophic@iecyber.co.il

India Smart Grid Forum
CBIP Building, Malcha Marg,
Chanakyapuri,
Delhi-110021
Website: www.indiasmartgrid.org