



Digital sovereignty



bitsec

nixu
cybersecurity.

<kahn
>pedersen


C-Resiliens


TUTUS

Nationellt Sensorsystem

Mollitiam


Tyr CYBER
Defense


FÖRSVARSMAKTEN

 SAAB


Office of Naval Research
ONR
Science & Technology



 Säkerhetspolisen



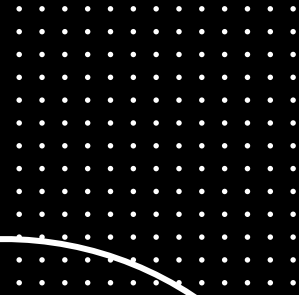

REGERINGSKANSLIET

 Посольство Швеции
в Москве

André Catry

- Entrepreneur
 - C-Resiliens, Tutus Data, Mollitiam , Nationellt SensorSystem , Tyr Cyber Defense, Bitsec
- Author
 - Honungsapan, Tigerögat, Solroskoden
- Advisor
 - Chief engineer / IT & Security Architect SAAB (Consultant)
 - Law firm Kahn Pedersen
 - Security expert /Lead Security Consultant
 - IT & Security Architect / Investigator / Analyst / IT-Forensics
- Security Consultant
 - IT defense unit (ITF)
 - Military Intelligence & Security Service MUST (CERT)
- Avdelningsdirektör (Principal administrative officer)
 - IT security advisor to government agencies
 - Computer Forensics / Investigations
 - Lawful interception
- Departementssekreterare (First Secretary, Desk Officer)
 - IT security, 4 years embassy Moskva
 - Project manager





André Catry

- Official Uber Elite Cyber Techno Master Ninja Haxor
- Winner of the 2004 Defcon hacking competition in Las Vegas



DEF CON FORUMS

Digital sovereignty

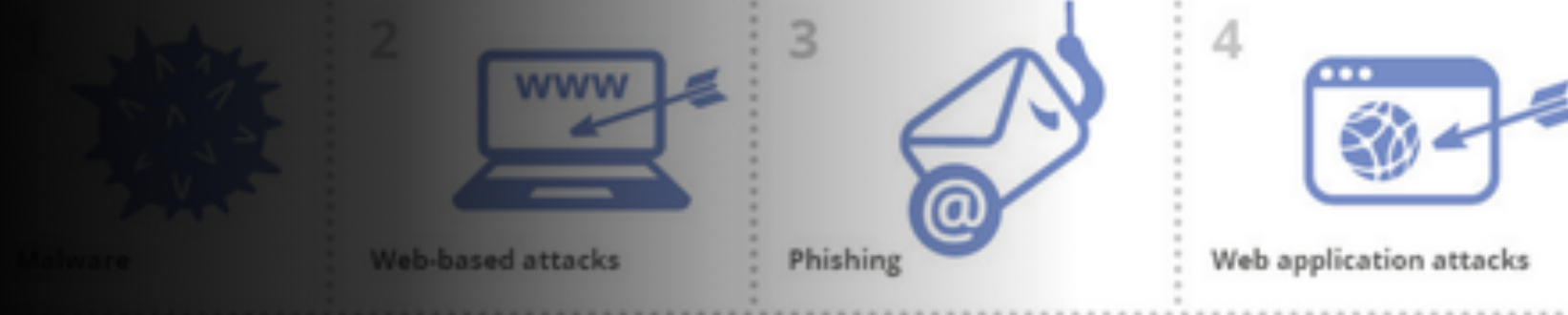
- Digital sovereignty is necessary to ensure our nation effective national independence over time and to safeguard the human rights and freedoms of it's people.
- Whoever controls the access to a nation's data. Has control of that nation.

Uppföljaren till *Honungsapan* och *Tigerögat*

GATRY & TORESSON SOLROS- KODEN



Cybersecurity threat landscape



TOP 15 CYBER THREATS



Our main headache since about 2015

Cyber crime as an industry

- a) Lack of security design, awareness and poorly programmed and maintained software
- b) Enabled by cryptocurrency
- c) Tolerated by rogue states

- We have been in a state of low intensity cyber war with Russia since the 90's
- Now it's going to escalate

Russia-Ukraine Cyberwar Participants 2022



THREAT ANALYSIS CENTER (ETAC)™



Cyberwarfare Russia - Ukraine

Sweden and
the west is not
neutral in this
conflict



EXTRA



Egna orden bevis mot misstänkta bröderna

Peyman och Payam Kia misstänks ha spionerat för Ryssland

HONUNGSAPAN

(HoneyMonkey)

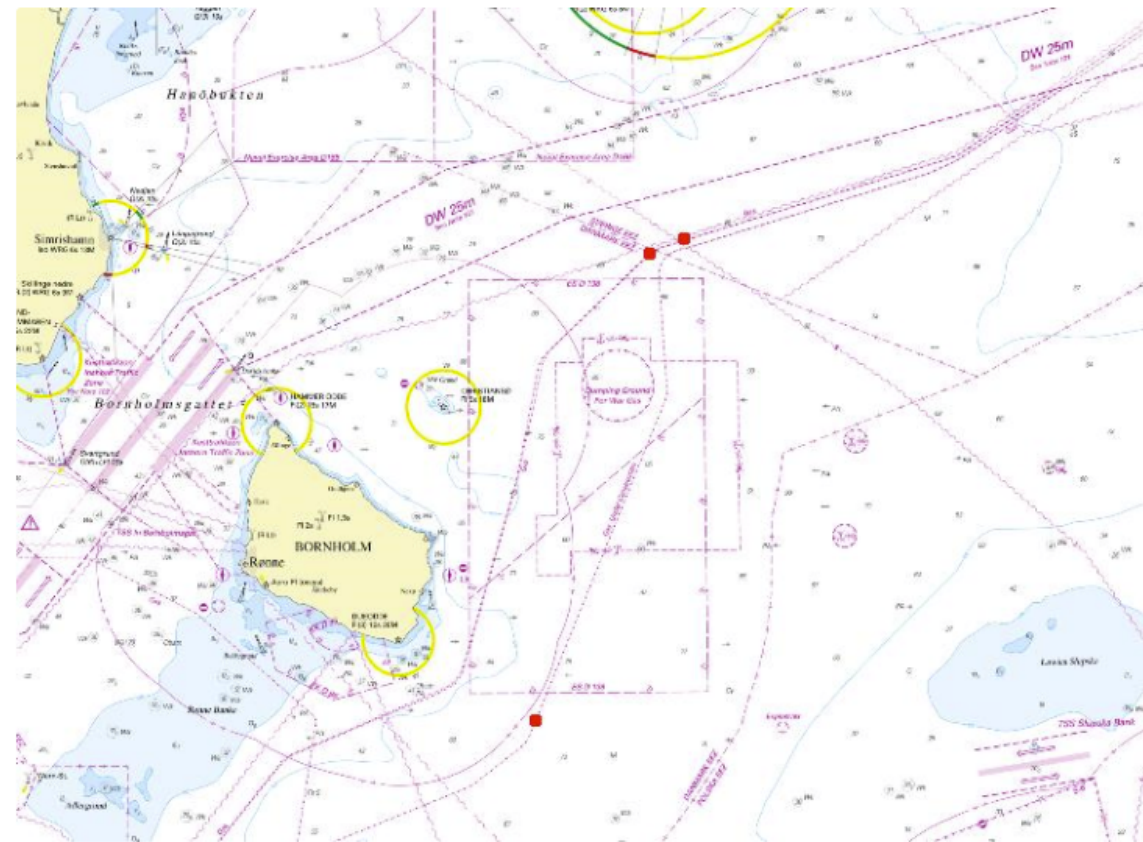
- National Backups
 - Who in Sweden is responsible for evacuating national data
- The electric power supply
 - Do we have any resilience
- Data centers located above ground
- TEMPEST - RÖS
 - Have we forgotten about this
- New and old hacker gadgets
 - USB - Implants - Drones
- Protective security
 - Who can (should) we trust

TIGERÖGAT (TIGER'S EYE)

- Sweden is one of the world's most digitized societies
- Digital economy - stock market - Robot AI trading
- Heavy reliance on single systems
 - BankID
- Infrastructure
 - 3/4/5-G
 - Internet
- Lack of national regulations and laws - Cyber IKFN (rules of engagement)

Sjöfartsverkets arbete med anledning av läckor på gasledningar i Östersjön

Nyhet 2022-09-27

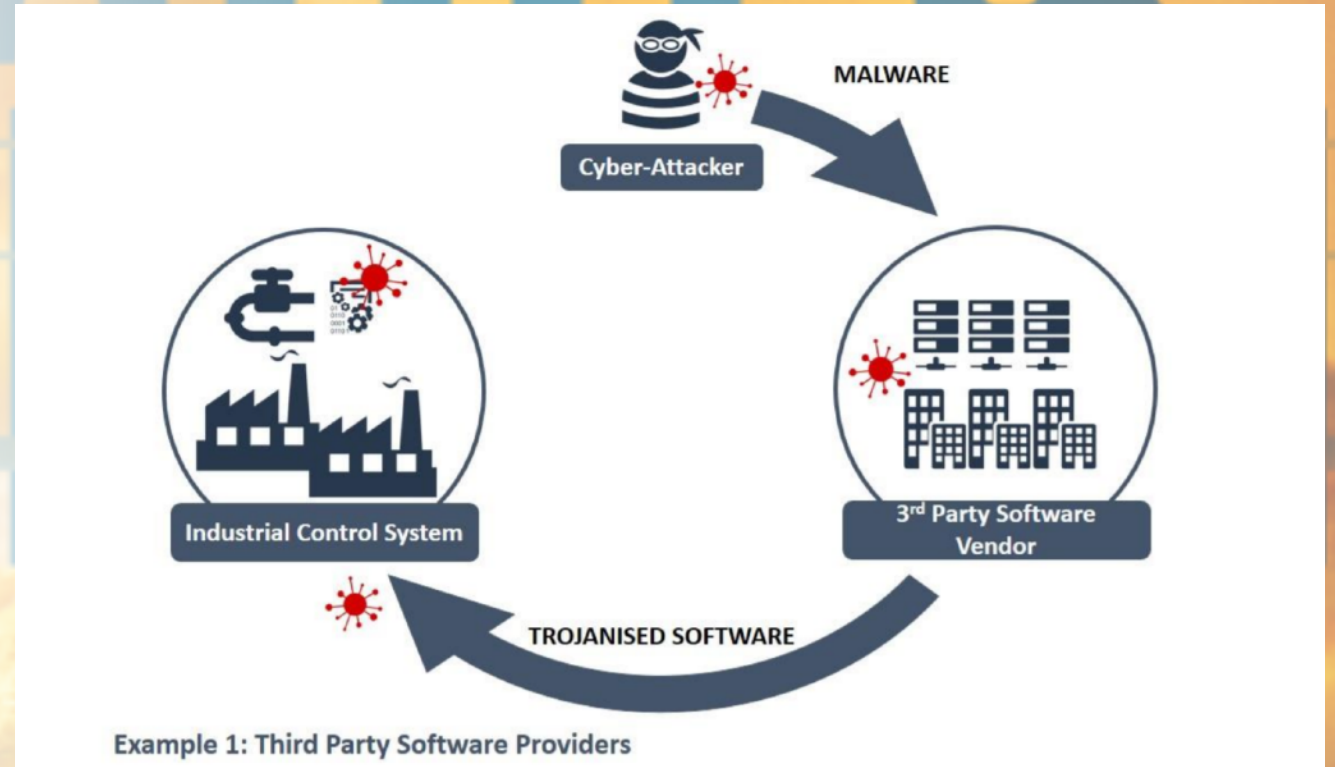


De röda punkterna visar positionerna för läckorna.

Med anledning av läckor på gasledningarna Nordstream 1 och Nordstream 2 på svenskt och danskt vatten strax utanför Bornholm har Sjöfartsverket skickat ut navigationsvarningar på Navtex och VHF om att fartyg ska hålla sig borta från området. Det är även varningar utfärdade för flygplan med 1 000 meters säkerhetshöjd.

SOLROSKODEN(SunflowerCode)

- Sweden - West is vulnerable
- Russia will retaliate
- Supply-chain attacks
 - Solarwinds 2021
 - NotPetya 2017
 - Coop 2021
 - Denmark DSB 2022



Ukraine power grid hacks

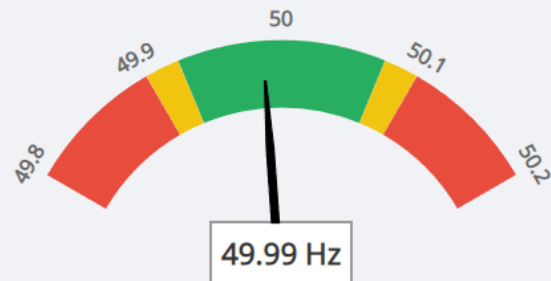


The control room

Balance

In order for the electricity system to work, there must always be a balance between production and consumption of electricity and a voltage frequency of 50 Hz.

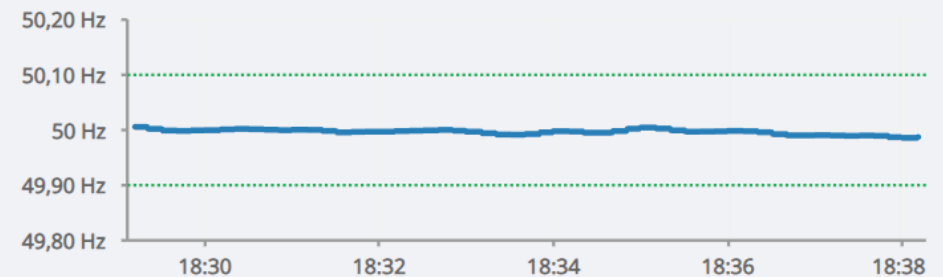
Current frequency



Measuring the frequency of the network is like checking the blood pressure. The frequency should always be 50 Hz. Then there is a balance between production and consumption and the electric system is healthy. If consumption is higher than production.

Data source: Statnett

Past 15 minutes



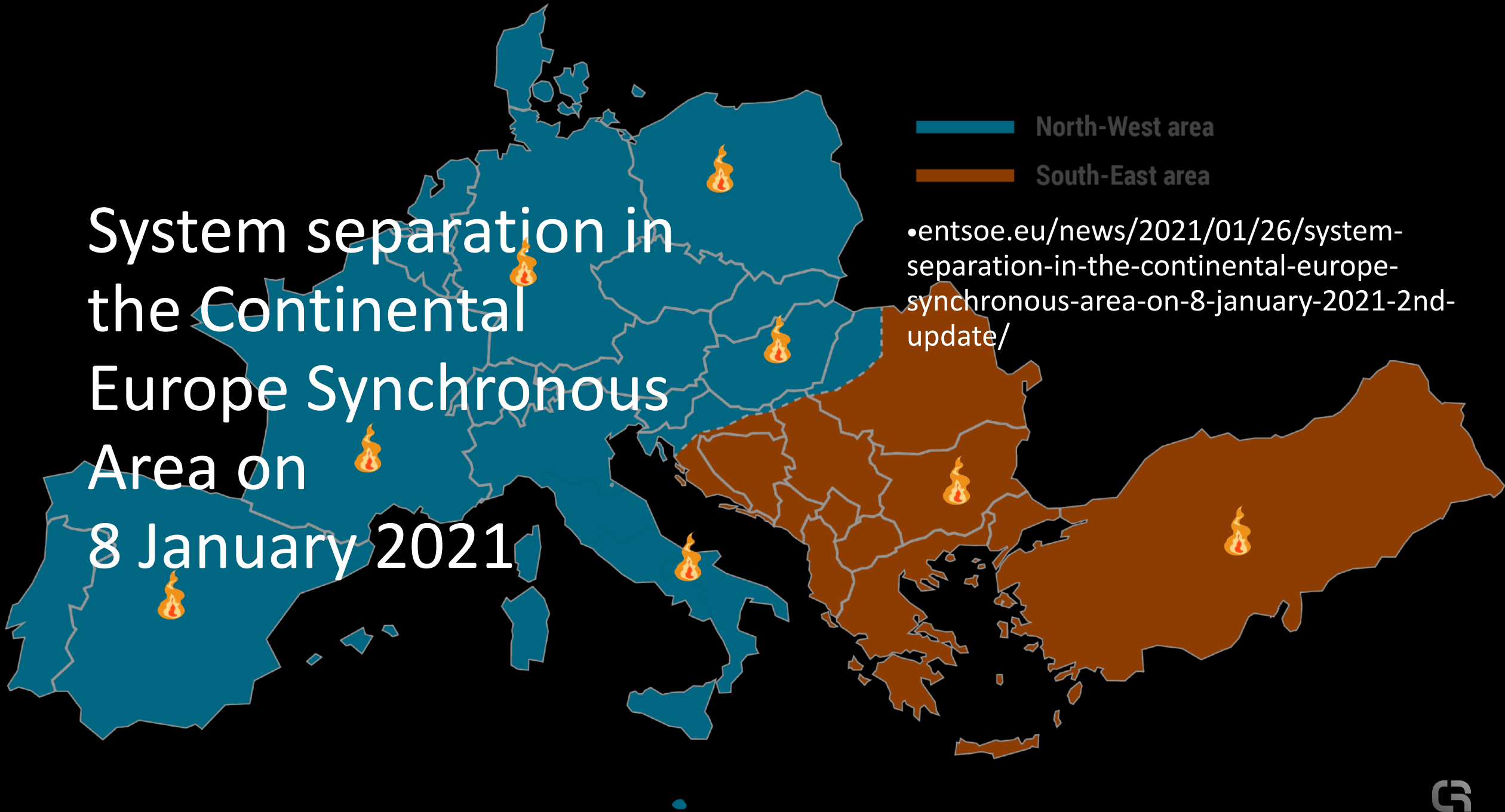
The frequency will sink, if production is higher than consumption the frequency will rise. The balance is regulated both automatically and manually by increase or decrease of production or decrease of consumption.

Data source: Statnett

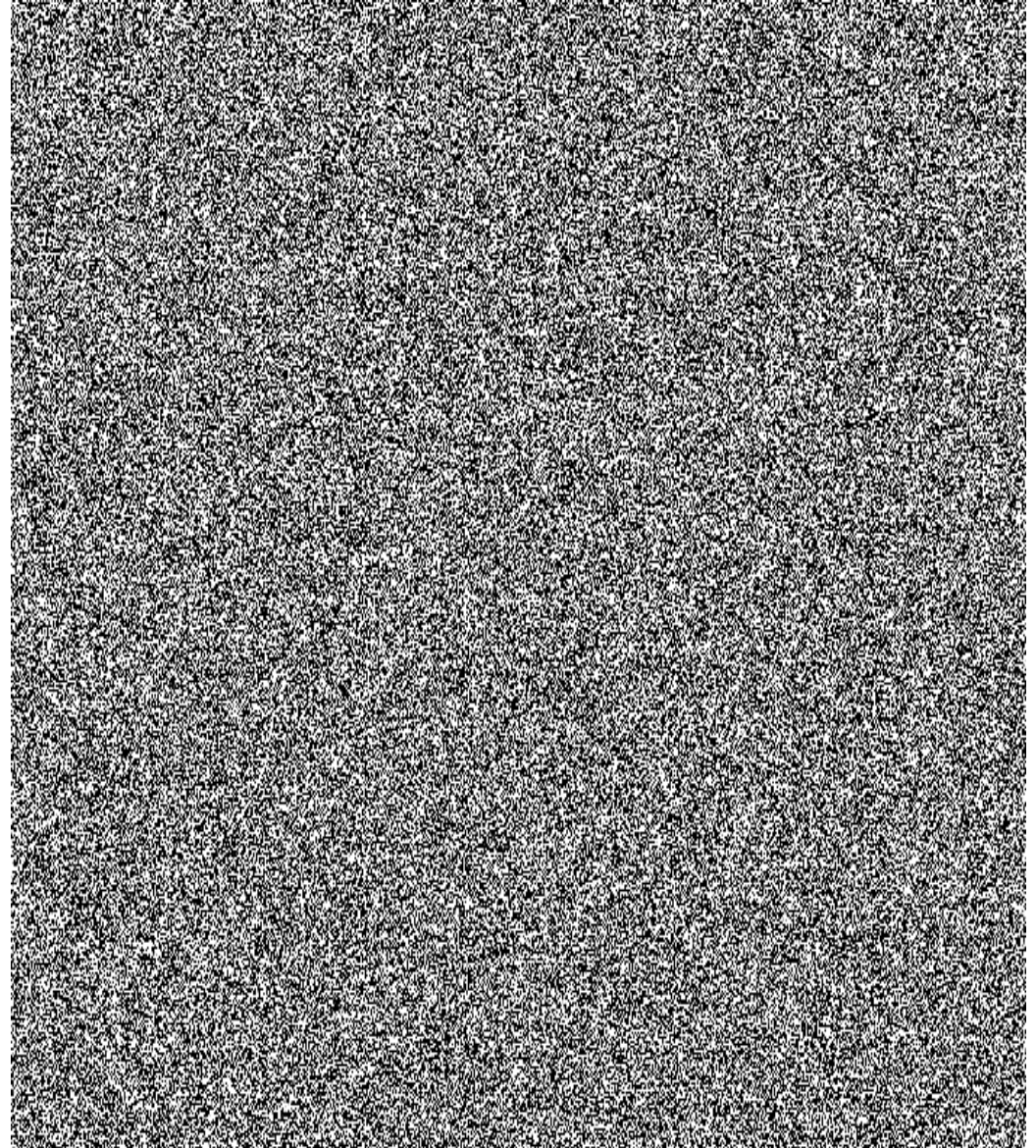
System separation in the Continental Europe Synchronous Area on 8 January 2021

North-West area
South-East area

• entsoe.eu/news/2021/01/26/system-separation-in-the-continental-europe-synchronous-area-on-8-january-2021-2nd-update/



Sweden's
Somewhere on
Data Centers
the Baltic Sea
Hyperscalers





André Catry

andre@catry.se

