

Advertising As Surveillance

How the advertising networks became ultimate spying tool.

Matej Kovačič

<https://telefoncek.si>

StripeCon

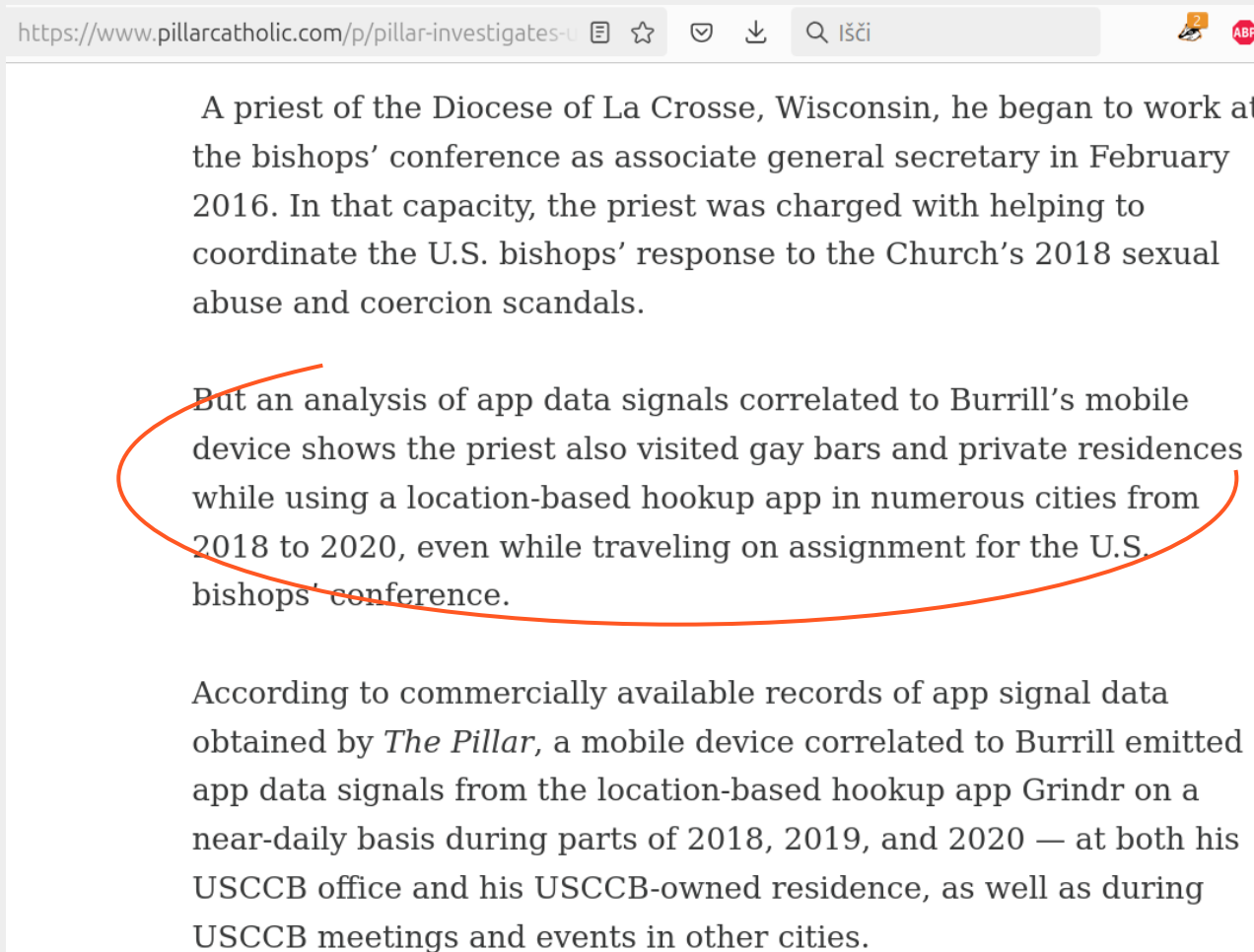
Ljubljana, September 19th 2024







Identifying sinners with technology



In 2021, Jeffrey Burrill, an American Catholic priest and general secretary of the American Bishops' Conference, resigned from his position in the church...

Identifying sinners with technology



https://www.pillaratholic.com/p/pillar-investigates-u...     Iščí  

A priest of the Diocese of La Crosse, Wisconsin, he began to work at the bishops' conference as associate general secretary in February 2016. In that capacity, the priest was charged with helping to coordinate the U.S. bishops' response to the Church's 2018 sexual abuse and coercion scandals.

But an analysis of app data signals correlated to Burrill's mobile device shows the priest also visited gay bars and private residences while using a location-based hookup app in numerous cities from 2018 to 2020, even while traveling on assignment for the U.S. bishops' conference.

According to commercially available records of app signal data obtained by *The Pillar*, a mobile device correlated to Burrill emitted app data signals from the location-based hookup app Grindr on a near-daily basis during parts of 2018, 2019, and 2020 — at both his USCCB office and his USCCB-owned residence, as well as during USCCB meetings and events in other cities.

Reason? Catholic media outlet The Pillar published information that the priest violated the commandment of celibacy, as he allegedly used gay apps on his phone and visited gay bars and bathhouses.

Identifying sinners with technology

But how did the media actually get the information with which it compromised the priest?

Well, this is where the story just begins...

RTB

RTB (Real-Time Bidding): an online advertising system that enables the automated buying and selling of advertising space in real time.

System enables precise targeting of advertising campaigns, i. e. to direct ads to very precisely defined groups of people, according to the desired demographics, location, their behavioural data, etc.

RTB

The RTB system categorizes individuals on the basis of various data, but roughly speaking, it is an extensive collection of:

- demographic data (which includes gender, age, education, occupation,...)
- information about family status,
- data about user behavior online (search history, clicks, ...),
- individual purchasing habits,
- location data (we always carry our phones with us!),
- data about the user's devices (smartphone, tablet or computer brand, operating system and web browser, ...)
- and much more..!

RTB

Extensive user segmentation is then carried out in the background based on the collected data.

The system classifies users into various categories, such as “Industry - Manufacturing - Aerospace and Defense”, “Family member of an employee in the military”, “Civil servant - elected official”, and of course also “Television journalist” or “Cleric”.

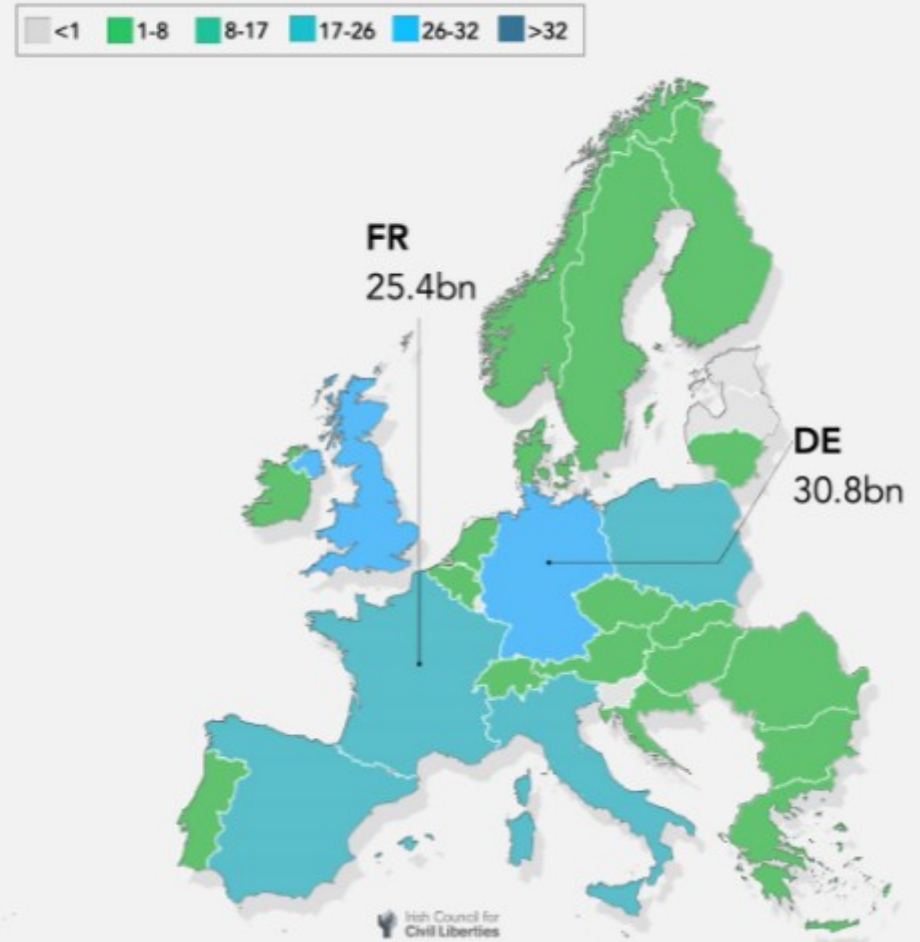
Each of these categories can then be further divided into subcategories based on their interests, behavioural patterns, demographic data, etc.

Volume of RTB data

RTB broadcasts per person, daily



RTB broadcasts per country, daily (billions)



Number of RTB broadcasts by European country. Source: »Europe's hidden security crisis« report, 2023.

What about privacy?

Advertisers claim data are anonymized, so it is practically impossible to identify specific individuals with them.

*But “can a third party obtain private information about specific individuals by buying online ads?”**

Researchers from the University of Washington has shown, that for just 1000 USD they can monitor the physical movements of a specific individual and the use of sensitive mobile applications.

* Exploring ADINT: Using Ad Targeting for Surveillance on a Budget - or - How Alice Can Buy Ads to Track Bob.

Advertising... or spying?

The techniques of collecting advertising data resemble spying because they involve surveillance-like monitoring of users' activities across websites, apps, and devices, often without users being fully aware of the extent of data being gathered or how it's used.

Advertising and spying are connected through data collection practices.

So... why not use advertising data for spying?

Ad-Int

 HAARETZ

Revealed: Israeli Cyber Firms Have Developed an 'Insane' New Spyware Tool. No Defense Exists

A Haaretz investigation reveals that Israeli cyber companies developed technology that exploits the advertising system at the heart of the online economy to monitor civilians, hack into their phones and computers, and spy on them. This terrifying capability, against which no defense currently exists, has already been sold to a nondemocratic country

Ad-Int

Haaretz did not publish many technical details about this in September, and their article went relatively unnoticed by the public.

However, security experts at that time suspected, that the Israelis were using advertising networks both:

- as a system for identifying targets, and,
- as a delivery system for delivering malicious software to phones.

Ad-Int

Irish Council for Civil Liberties report (Europe's hidden security crisis, September 2023):

- Virtually anyone can get an access to RTB data.
- RTB data is exported without any limits to countries such as China and Russia.
- Russian companies are, among other things, buying from Google the profiles of Russian Internet users who visit Russian opposition websites abroad. *Probably for marketing purposes only.*

Ad-Int

Private companies that are directly involved in surveillance and intelligence can register as an advertiser (Demand Side Platforms), which enables them to obtain advertising data directly from providers.

Rayzone is offering »mass collection of all internet users in a country«.

Near Intelligence claims to have profile data on 152 million Europeans, including the identified location of their home, workplace and places they visit frequent.

ISA, Israeli Security Academy & technologies, developed Patternz, a tool that uses RTB data to profile 5 billion individuals, also targeting children of their targets.

Patternz

The screenshot displays the Patternz web application interface. At the top, there is a navigation bar with the logo "Patternz" on the left and menu items "Dashboard", "Research", "Sections", "System Management", and "Sign out" on the right. A search icon, a chat icon, and a notification bell icon are also present in the top right corner.

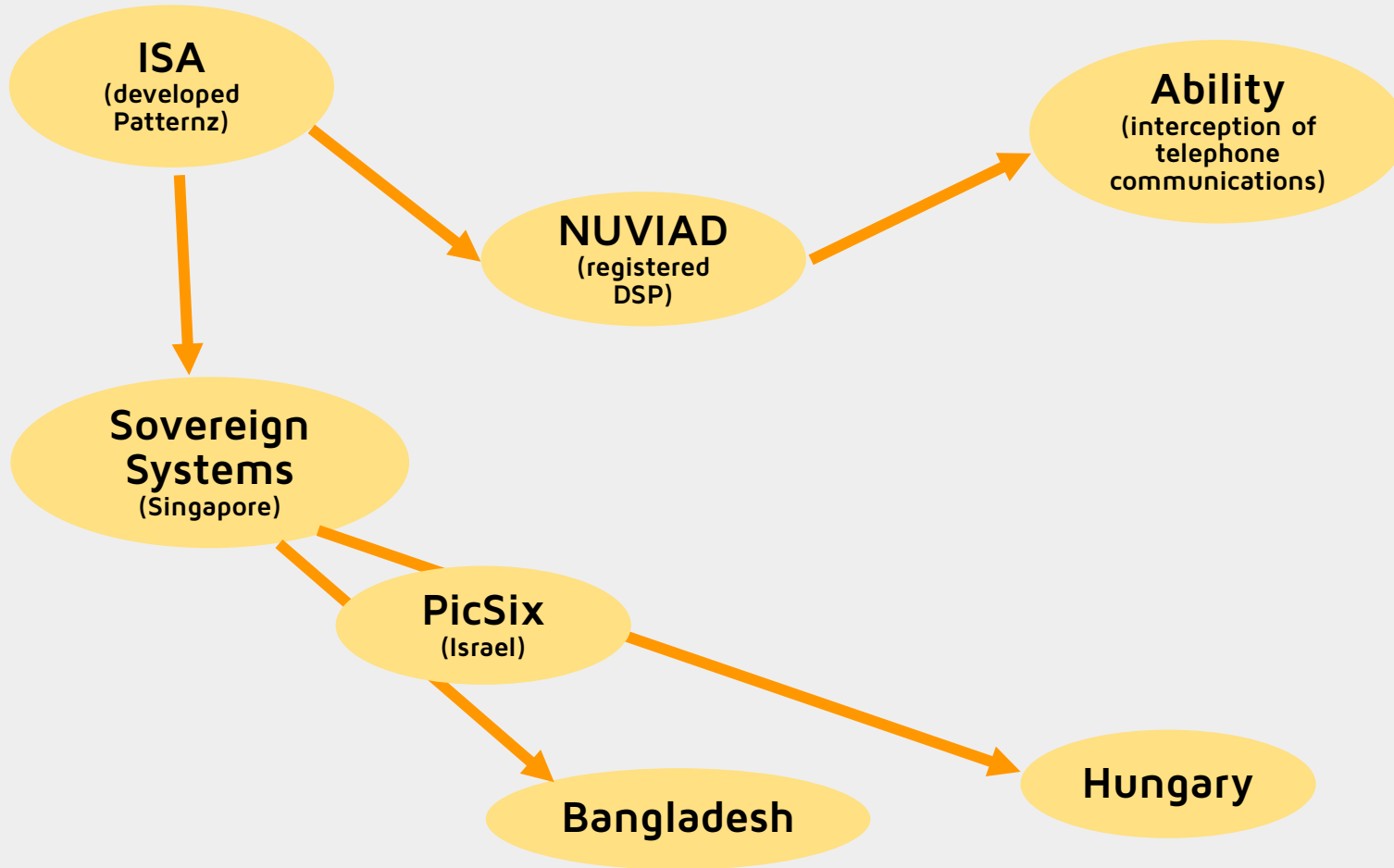
Below the navigation bar, there is a user profile section on the left with a blacked-out name and two buttons: "Add to Watchlist" and "Add to Group".

The main content area is divided into three columns:

- Map:** A Google Maps view of Nahariya, Israel, showing various landmarks like "Municipality Library", "Madison Hotel Nahariya", and "NEVE YITSHAK RABIN". The map is labeled "LIVE MAP" and has "Map" and "Satellite" tabs.
- USER LOCATIONS:** A panel with a "Timeline" and "Refresh" button. It features a calendar for "MARCH 2020" with the 18th highlighted. Below the calendar is a search bar and a list of 10 items per page. The list shows addresses in Israel, such as "8993, Israel", "Even Menahem, Israel", and "Sderot HaGa'ator, Nahariya, Israel".
- USER GENDER:** A panel showing a male icon and a progress bar.
- USER AGE:** A panel showing a male icon and a progress bar.
- 2 32 5,273:** Summary statistics for "APPS", "LOCATIONS", and "EVENTS".
- HOME AND WORK ZONES:** A panel showing two zones: "Israel" (last seen about 215 days ago) and "Nahariya, Israel" (last seen about 211 days ago).
- PROFILE KEYWORDS:** A panel showing tags for "technology", "business", "culture", "politics", "belief", and "science".
- HOBBIES AND INTERESTS:** A panel showing tags for "Net Conferencing", "Business Software", and "Technology & Computing".
- USER DEVICE:** A panel showing the user's device as "samsung sm-n950f" and "Android 9".

At the bottom of the USER LOCATIONS panel, it says "Showing 1 to 10 of 100 entries" and includes a pagination control with buttons for "Previous", "1", "2", "3", "4", "5", "10", and "Next".

Patternz



Kompromat

INTELLIGENCE AND
COUNTERTERRORISM

RTB IDENTIFICATION CODES TO TIE RTB
BROADCAST DATA TO EXISTING DOSSIERS

MICROSOFT
"XANDR"

GOOGLE
"DOUBLE CLICK BID MANAGER"



Data seller	Country	Segment Name	TubeMogul ID	Turn ID	AppNexus ID	DBM ID	MediaMath ID	The Trade Desk ID	Conversant ID	Adform ID
Bombora	France	Job Function - Government - <u>Elected Officials</u>	1812	9283	2531529, 217527254539	2004		1827	1039	1215
Bombora	France	Job Function - Government - <u>Employees</u>	1813	9284	2531530, 217527254659	2005		1828	1040	1216
Bombora	France	Industry - Energy, <u>Utilities and Waste</u> - <u>Energy</u>	1928	9399	2531645, 217527268339	2120		1943	1154	1330
Bombora	France	Industry - Energy, Utilities and Waste - <u>Utilities</u>	1929	9400	2531646, 217527268459	2121		1944	1155	1331
Bombora	France	Industry - Government - <u>Public Safety, Police and Fire Departments</u>	1941	9412	2531658, 217527269899	2133		1956	1167	1343
Bombora	France	Industry - <u>Manufacturing - Aerospace and Defense</u>	1956	9427	2531673, 217527271699	2148		1971	1182	1358
MeritDirect	France	Industry - <u>Aerospace / Defense / Military</u>	4550	12757	5424482	394589845	5623	4823	3741	2980
MeritDirect	France	Industry - Government / <u>Public Admin</u>	4566	12773	5424498	394589893	5639	4839	3757	2996
ShareThis	France	Business and Industrial - <u>Aerospace and Defense - Space Technology</u>	26690	31215	11829784, 217541970228				22427	22143, 241
ShareThis	France	Business and Industrial - <u>Energy and Utilities - Electricity</u>	26731	31256	11829827, 217541970351				22468	22184, 242
ShareThis	France	Business and Industrial - <u>Energy and Utilities - Oil and Gas</u>	26733	31258	11829829, 217541970357				22470	22186, 242
ShareThis	France	Business and Industrial - <u>Energy and Utilities - Renewable and Alternative Energy</u>	26734	31259	11829830, 217541970360				22471	22187, 242
ShareThis	France	Business and Industrial - <u>Energy and Utilities - Water Supply and Treatment</u>	26736	31261	11829832, 217541970366				22473	22189, 242
ShareThis	France	Law and Government - <u>Government - Intelligence and Counterterrorism</u>	27040	31565	11830152, 217541971278			99703	22777	22493, 245
ShareThis	France	Law and Government - <u>Government - Legislative Branch</u>	27041	31566	11830153, 217541971281			99704	22778	22494, 245
ShareThis	France	Law and Government - <u>Government - Public Finance</u>	27044	31569	11830157, 217541971290			99707	22781	22497, 245
ShareThis	France	Law and Government - <u>Government - Public Policy</u>	27045	31570	11830158, 217541971293			99708	22782	22498, 245
ShareThis	France	Global ShareThis - Law and Government - <u>Military - Army</u>	27061	31586	11830174, 217541971341			99724	22798	22514, 245
ShareThis	France	Law and Government - <u>Military - Marines</u>	27062	31587	11830175, 217541971344			99725	22799	22515, 245
ShareThis	France	Law and Government - <u>Military - Navy</u>	27063	31588	11830176, 217541971347			99726	22800	22516, 245
ShareThis	France	Law and Government - <u>Public Safety - Law Enforcement</u>	27068	31593	11830181, 217541971362			99731	22805	22521, 245
Lifesight	France	Buildings and Structures - <u>Location Visited - Government Offices</u>	69833	80274	21017030	945150726	58705, 90524		59869	
Selling Simplified	France	Job Function - Government - <u>Seniority - Associate</u>	78150	77086	26923691	6674924953	75330	107840		
Selling Simplified	France	Job Function - Government - <u>Seniority - CXO</u>	78151	77087	26923696	6674924956	75331	107841		
Selling Simplified	France	Job Function - Government - <u>Seniority - Director</u>	78152	77088	26923701	6674924959	75332	107842		
Selling Simplified	France	Job Function - Government - <u>Seniority - Manager</u>	78153	77089	26923705	6674924962	75333	107843		
Selling Simplified	France	Job Function - Government - <u>Seniority - Senior</u>	78154	77090	26923710	6674924965	75334	107844		
Selling Simplified	France	Job Function - Government - <u>Seniority - Vice President</u>	78155	77091	26923715	6674924968	75335	107845		
Selling Simplified	France	Job Function - <u>Military & Protective Services - Seniority - Associate</u>	78302	77238	26924569	6674925337	75458	107992		
Selling Simplified	France	Job Function - <u>Military & Protective Services - Seniority - Manager</u>	78304	77240	26924590	6674925343	75460	107994		
Selling Simplified	France	Job Function - <u>Military & Protective Services - Seniority - Senior</u>	78305	77241	26924592	6674925346	75461	107995		
Lifesight	France	Intent - <u>Government & Public Sector Jobs</u>	78804	80258	26925984	6674926615	75895, 90509			
ShareThis	France	People and Society - <u>Family and Relationships - Military Families</u>	81654		27498218	6861226170				
Global Fifty	France	Business & Industrial - <u>Energy & Utilities - Energy & Utility Services</u>	83740			6985997228	81029			
Global Fifty	France	Business & Industrial - <u>Energy & Utilities - Oil & Natural Gas Industry</u>	83741			6985997231	81030			
Global Fifty	France	Business & Industrial - <u>Energy & Utilities - Renewable & Alternative Energy</u>	83742			6985997234	81031			
Global Fifty	France	Business & Industrial - <u>Transportation & Logistics (B2B) - Aerospace & Defense</u>	83772			6985997321	81060			
Dun & Bradstreet	France	Government - <u>Economic Programs</u>	87981		31965106	7338834915	90181	113696		118566
Dun & Bradstreet	France	Industry - <u>Government - Executive and Legislative</u>	87983		31961984	7338834921	90183	113698		118568
Dun & Bradstreet	France	Industry - Government - <u>National Security and International</u>	87986		31961989	7338834930	90186	113701		118571
ShareThis	France	Occupation - <u>Military</u>	61976, 900034, 71144		19823384, 217883253346	59566			55091	106610

Kompromat

One of the important targets are clearly European political decision-makers and employees in sensitive jobs.

Example of RTB profiles:

- "Government - Intelligence And Counterterrorism"
- "Government - National Security and International"
- "Person being in procurement Aerospace and Defence sector"
- "People who work in the military"
- "People working in judiciary"
- "Decision makers for the Government" in France and Germany
- "Employees in the field of nuclear energy"
- "Decision makers in political organizations"
- ...
- "Military spouses and family"

Kompromat

Profiling also includes psychological profiling.

Analytics tools are used to identify:

- people with financial problems,
- people with mental health problems or vulnerabilities,
- their sexual preferences,
- whether they have ever experienced sexual abuse in the past.
- ...

This exposes European institutions and industry to hacking, extortion and compromise, which in fact undermines European security.

Kompromat

Kompromat is short for “compromising material” - harmful information about someone that can be used to create negative publicity or for blackmail.

“Disparaging information that can be collected, stored, traded, or used strategically across all domains: political, electoral, legal, professional, judicial, media, and business”.

Kompromat does not necessarily target individuals or groups, but rather collects information that could be useful at a later time.

The word originates from the Russian language, came into public use in Soviet times, and its exact origin is from the jargon of the Soviet secret police from the 1930's.

Kompromat

So... does global advertising system smells like Soviet times to you?

And does abuse of RTB data by (Israeli) cyber surveillance and espionage companies remember you to Stalin, his secret police, purges and gulags?





Questions?

<https://telefoncek.si/>