

C4I 2017



2nd International Conference on C4I Alliance against Terrorism. Strategies and Capabilities

The Evolving Landscape of Cyber Breaches and Lacking Crisis Management Plan

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King Saud University



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2030



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Riyadh, 19 October 2017

The Evolving Landscape of Cyber Breaches and Lacking Crisis Management Plan

- Cyberspace, cyber breaches, cyber risks.
- Cyber attacks within other global risks.
- Economic impact of cyber attacks.
- Cyber attacks against public sector. Spain.
- Global cyber attack. Wannacry.
- How do we organise? Do we have a plan?
- Cooperation as a must.
- Cyberterrorism and the role of Intelligence.

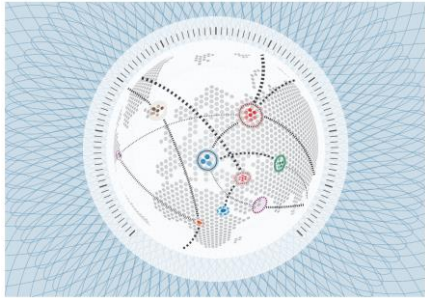
2017 *This Is What Happens In An Internet Minute*



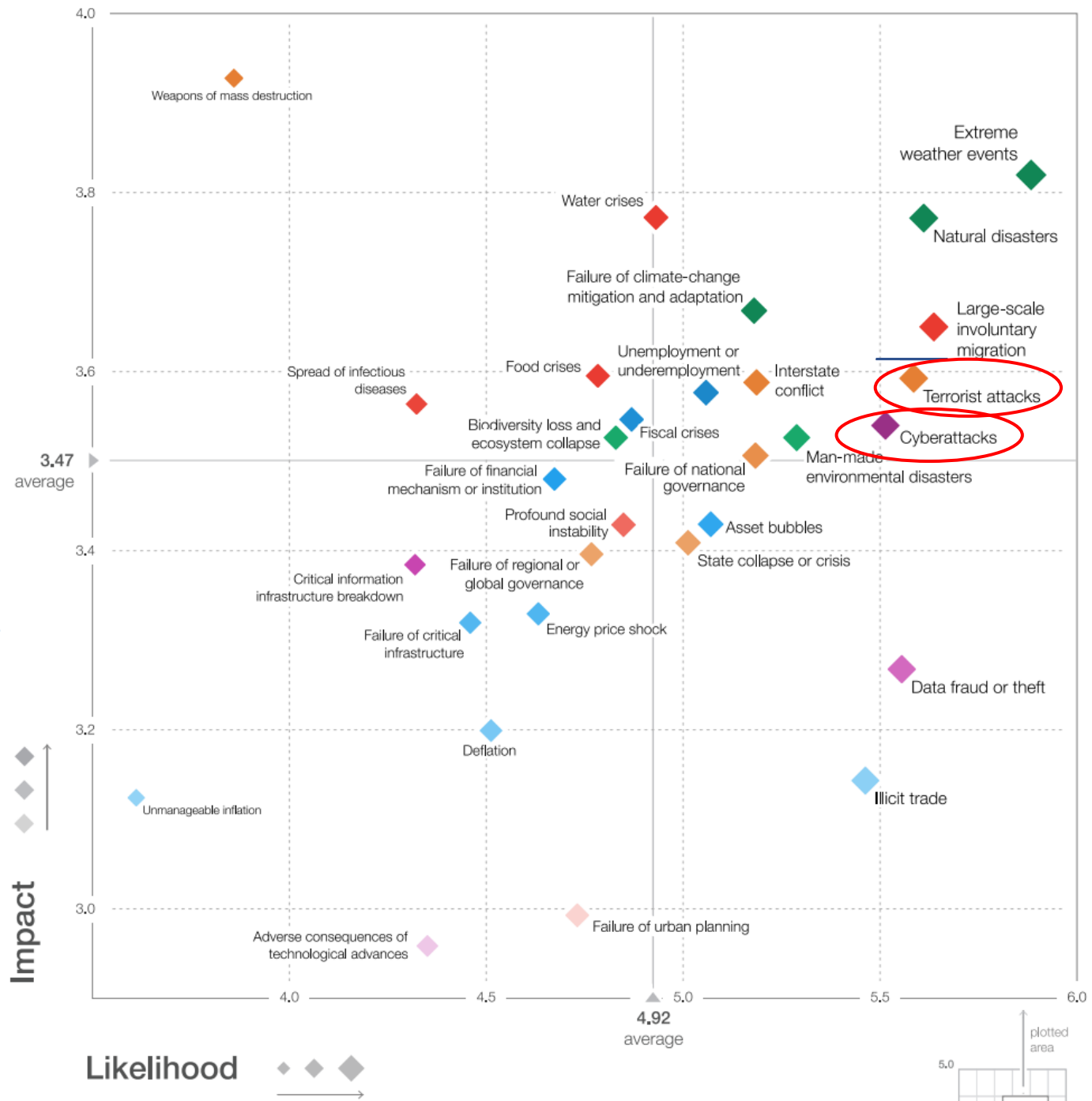
Created By:
@LoriLewis
@OfficiallyChadd



WORLD ECONOMIC FORUM



The Global Risks Report 2017





The Global Risks Interconnections



ATTACK ORIGINS

| # | Country |
|------|---------------|
| 2403 | China |
| 1175 | United States |
| 632 | Mil/Gov |
| 178 | Iceland |
| 105 | Hong Kong |
| 96 | India |
| 92 | Portugal |
| 84 | Japan |
| 83 | Thailand |
| 74 | South Korea |

ATTACK TARGETS

| # | Country |
|------|----------------|
| 4942 | United States |
| 168 | Hong Kong |
| 121 | Thailand |
| 66 | Portugal |
| 49 | Australia |
| 45 | United Kingdom |
| 43 | Norway |
| 38 | France |
| 33 | Liechtenstein |
| 32 | Turkey |

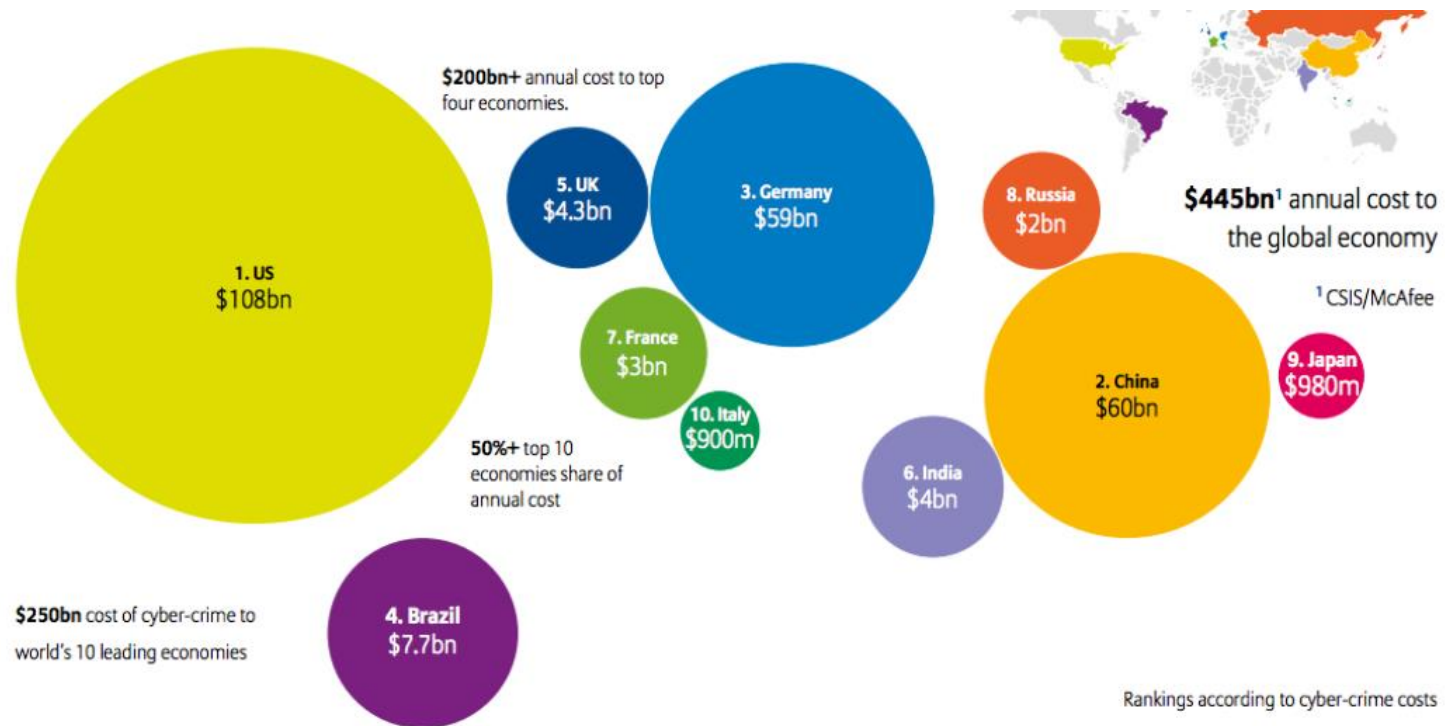
ATTACKS

| Timestamp | Attacker | | | Target | | Type | |
|------------------------|-------------------------|--------------------------|-----------------|----------------------------|---------|-------|--|
| | Organization | Location | IP | Location | Service | Port | |
| 2014-09-06 12:41:56.36 | CHINANET-HN Hengyang | Changsha, China | 218.77.79.43 | Seattle, United States | telnet | 23 | |
| 2014-09-06 12:41:56.64 | Telehouse International | Boulleville, France | 85.90.60.214 | Seattle, United States | unknown | 60116 | |
| 2014-09-06 12:41:56.90 | Hurricane Electric | Stanford, United States | 184.105.139.85 | unknown, Austria | ssdp | 1900 | |
| 2014-09-06 12:41:57.40 | University of Michigan | Ann Arbor, United States | 141.212.121.21 | Kirksville, United States | https | 443 | |
| 2014-09-06 12:41:57.67 | Korea Telecom | Ansan, South Korea | 119.207.192.179 | Kirksville, United States | unknown | 8370 | |
| 2014-09-06 12:41:58.00 | Orange Slovensko, a.s. | Bansk Bystrica, Slovakia | 78.141.122.196 | Saint Louis, United States | unknown | 52499 | |
| 2014-09-06 12:41:58.38 | CHINANET-HN Hengyang | Changsha, China | 218.77.79.43 | Kirksville, United States | telnet | 23 | |
| 2014-09-06 12:41:59.15 | TalkTalk | London, United Kingdom | 92.27.87.227 | unknown, Hong Kong | unknown | 11258 | |

ATTACK TYPES

| # | Service | Port |
|------|---------------|------|
| 1920 | telnet | 23 |
| 528 | ssh | 22 |
| 330 | domain | 53 |
| 261 | netbios-ns | 137 |
| 177 | ms-sql-s | 1433 |
| 155 | microsoft-ds | 445 |
| 117 | ms-wbt-server | 3389 |
| 98 | netbios-dgm | 138 |

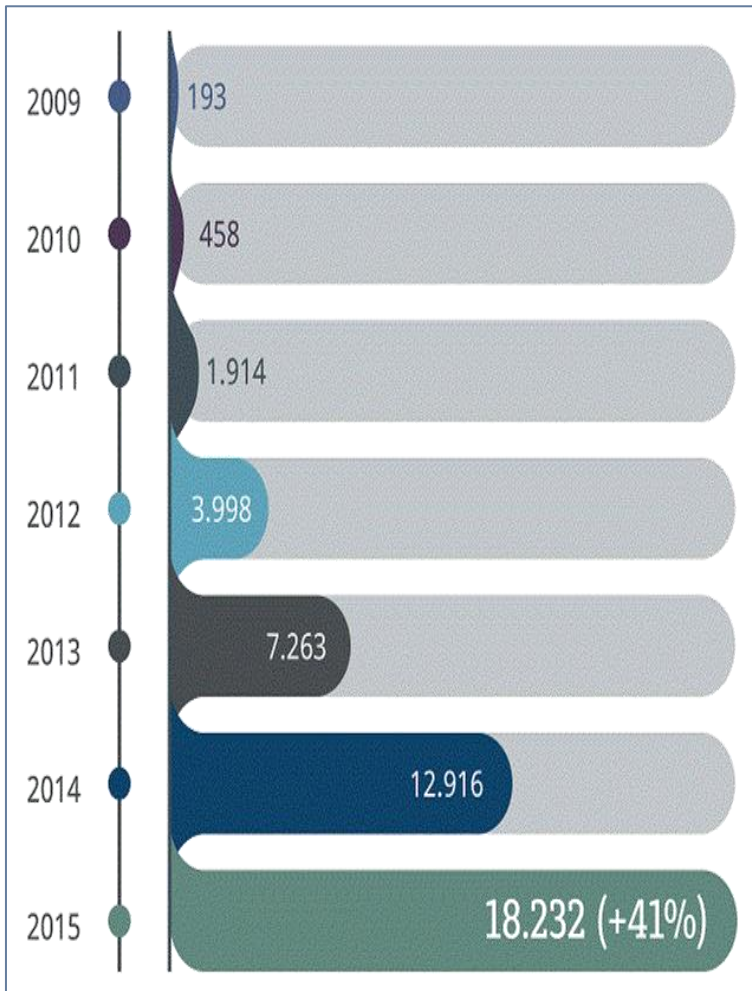
How much does cyber-crime cost the world's leading 10 economies?



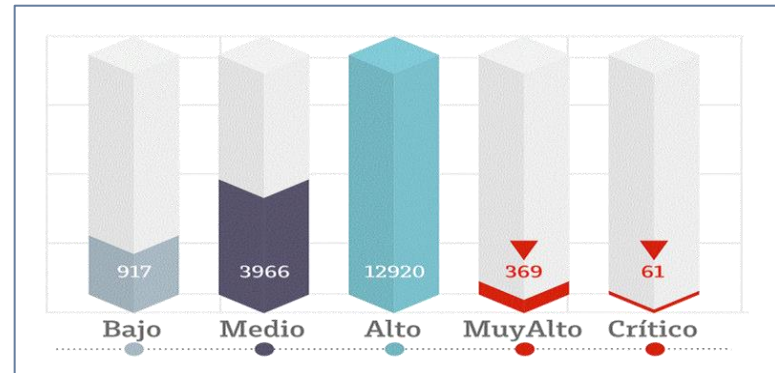
| Country Ranking by GDP ¹ | Cyber-crime as a % of GDP ² | Estimated cost ³ | Country Ranking by GDP ¹ | Cyber-crime as a % of GDP ² | Estimated cost ³ | | |
|-------------------------------------|--|-----------------------------|-------------------------------------|--|-----------------------------|------|---------|
| 1 US | \$16.8trn | .64% | \$108bn | 6 UK | \$2.7trn | .16% | \$4.3bn |
| 2 China | \$9.5trn | .63% | \$60bn | 7 Brazil | \$2.4trn | .32% | \$7.7bn |
| 3 Japan | \$4.9trn | .02% | \$980m | 8 Russia | \$2.1trn | .10% | \$2bn |
| 4 Germany | \$3.7trn | 1.60% | \$59bn | 9 Italy | \$2.1trn | .04% | \$900m |
| 5 France | \$2.8trn | .11% | \$3bn | 10 India | \$1.9trn | .21% | \$4bn |

Source: World Bank, CSIS/McFee Allianz Global Corporate & Speciality.

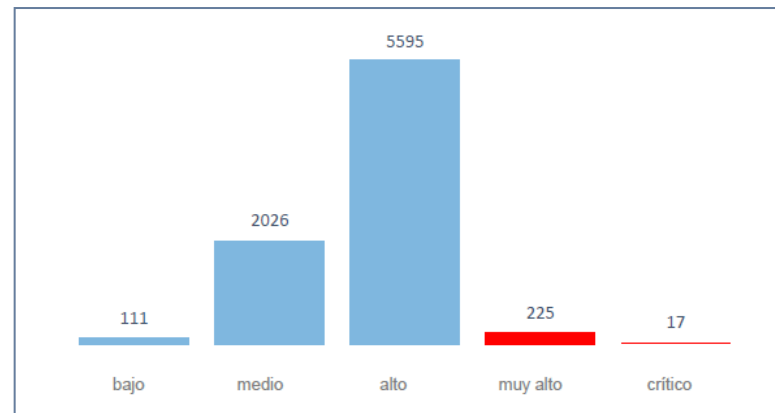
Cyberattacks against public sector in Spain



2015



2016



18 October 2017

Increase of 32 % related to same date 2016

WannaCry

Ransomware Attack



12th May 2017, malware WannaCry, attacking more than 200,000 computers in more than 150 countries





Ooops, your files have been encrypted!

English

What Happened to My Computer?

Your important files are encrypted.

Many of your documents, photos, videos, databases and other files are no longer accessible because they have been encrypted. Maybe you are busy looking for a way to recover your files, but do not waste your time. Nobody can recover your files without our decryption service.

Can I Recover My Files?

Sure. We guarantee that you can recover all your files safely and easily. But you have not so enough time.

You can decrypt some of your files for free. Try now by clicking <Decrypt>.

But if you want to decrypt all your files, you need to pay.

You only have 3 days to submit the payment. After that the price will be doubled.

Also, if you don't pay in 7 days, you won't be able to recover your files forever.

We will have free events for users who are so poor that they couldn't pay in 6 months.

How Do I Pay?

Payment is accepted in Bitcoin only. For more information, click <About bitcoin>.

Please check the current price of Bitcoin and buy some bitcoins. For more information, click <How to buy bitcoins>.

And send the correct amount to the address specified in this window.

After your payment, click <Check Payment>. Best time to check: 9:00am - 11:00am

CMT from Mondays to Friday

Payment will be raised on

5/16/2017 00:47:55

Time Left

02:23:57:37

Your files will be lost on

5/20/2017 00:47:55

Time Left

06:23:57:37

[About bitcoin](#)

[How to buy bitcoins?](#)

[Contact Us](#)



Send \$300 worth of bitcoin to this address:

12t9YDPgwueZ9NyMgw519p7AA8isjr6SMw

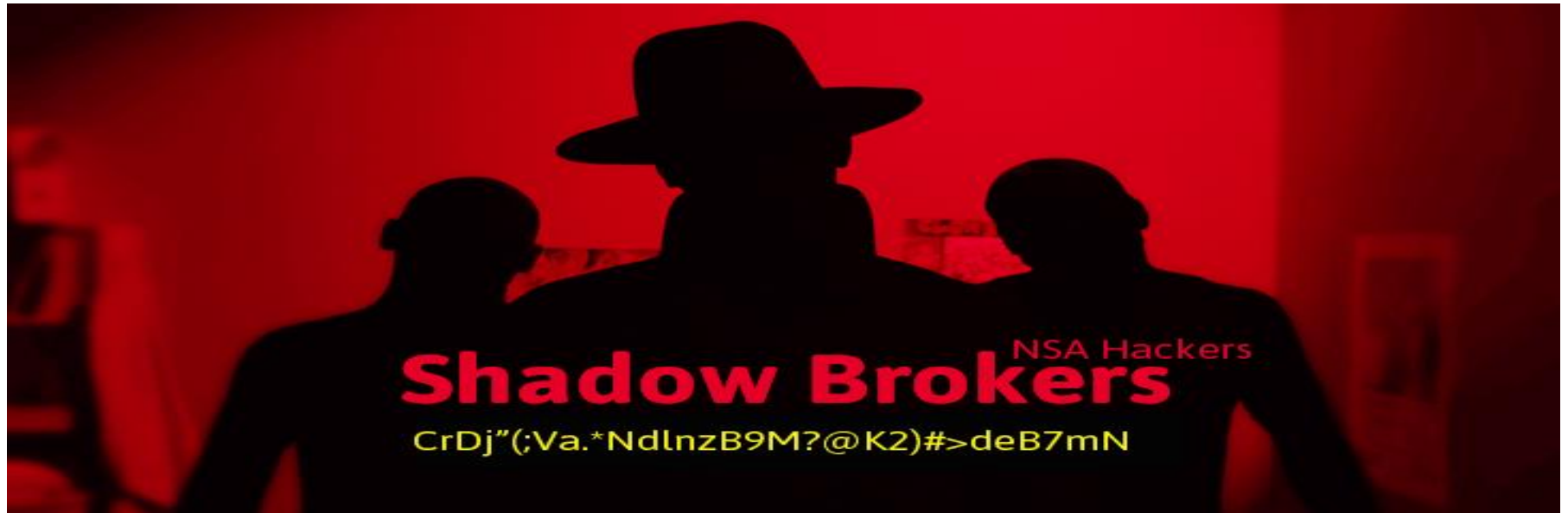
Copy

Check Payment

Decrypt



Microsoft



Wannacry Impact

United Kingdom 48 hospitals

Russia 70.000 attacks (30% world). 1000 PCs Ministry of Interior, banks, trains, telephone networks

China 4.300 Academic institutions, hospitals, train stations

France Car factories

India Police Andhra Pradesh, ATMs

USA FedEx, health organisations

Germany train stations advertisement systems

Indonesia Hospitals

Republic of Korea Hospitals

Brazil Petrochemical, judicial system, MoFA

Spain (private sector) Telephone companies

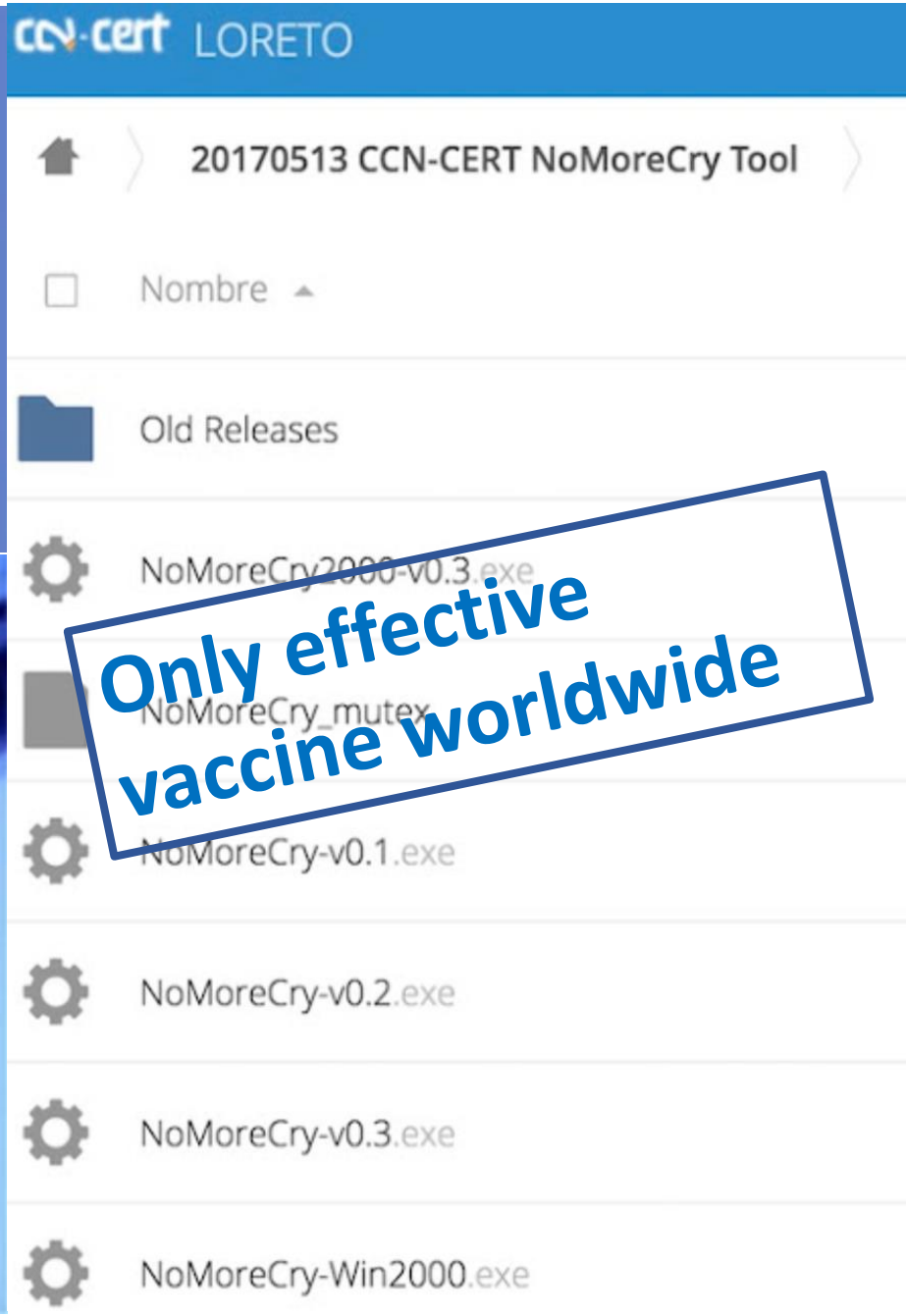
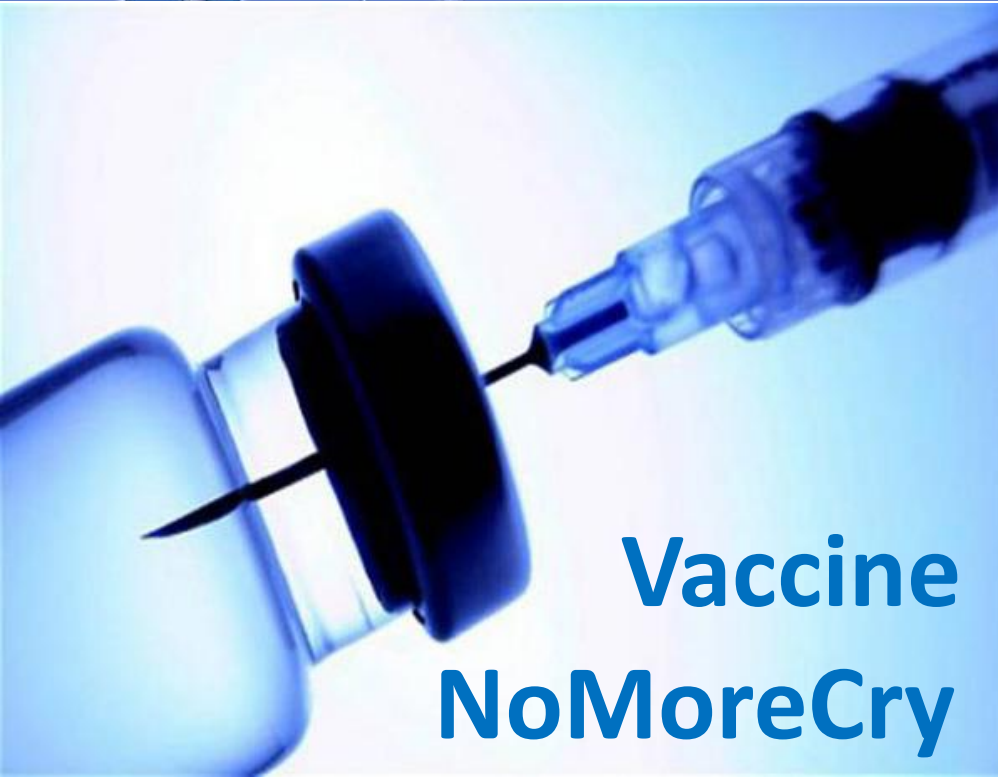
Wannacry impact on public sector in Spain

One tablet in one ambulance in La Rioja



Four PCs in Junta de Andalucía





ccn-cert LORETO

20170513 CCN-CERT NoMoreCry Tool

Nombre

Old Releases

NoMoreCry2000-v0.3.exe

NoMoreCry_mutex

NoMoreCry-v0.1.exe

NoMoreCry-v0.2.exe

NoMoreCry-v0.3.exe

NoMoreCry-Win2000.exe

Only effective vaccine worldwide

**Vaccine
NoMoreCry**



ccn-cert CERT Gubernamental español

capacidad de respuesta
ante incidentes seguridad tic
de seguridad de la información



NIVEL DE ALERTA
MUY ALTO

CASTELLANO
ENGLISH
CATALÀ
EUSKARA
GALEGO
VALENCIÀ

CERRAR SESIÓN

- PRINCIPAL
- SOBRE NOSOTROS
- INCIDENTES
- ACTUALIDAD CCN-CERT
- AVISOS Y ALERTAS
- HERRAMIENTAS
- FORMACIÓN
- MARCO LEGAL
- INFORMES
- S.A.T.
- ENS
- EMPRESAS ESTRATÉGICAS
- NOTICIAS
- ENLACES DE INTERÉS
- PREFERENCIAS

ÚLTIMAS VULNERABILIDADES

- CCN-CERT-1409-09702
MS14-028 - Importante: Vulnerabilidades en iSCSI p...
- CCN-CERT-1409-09701
IBM Security Bulletin: Rational License Key Server...
- CCN-CERT-1409-09700
IBM Security Bulletin: Exposed Keystores in IBM Ur...

[ver más...](#)

SERIES CCN-STIC

- Últimas Guías CCN-STIC
- CCN-STIC 455 Seguridad en iPhone (iOS 7.x)
- Últimas Guías CCN-STIC Serie 800 (ENS)
- CCN-STIC 851B ENS en Windows 7 Server 2008 R2 (servidor independiente)
- CCN-STIC
- Índice Guías CCN-STIC - Agosto 2014
- CCN-STIC 001
- Seguridad de las TIC en la Administración
- CCN-STIC 401 - Versión julio 2014
- Glosario de términos html
- Glosario de términos pdf

[ver más...](#)

NOTICIAS SEGURIDAD

INFORMES CCN-CERT PÚBLICOS

- CCN-CERT IA-02/14 Riesgos de uso de Windows XP tras el fin del soporte -Novedad
- CCN-CERT IA-21/13 Riesgos y amenazas del BYOD

[ver más...](#)

ÚLTIMOS INFORMES DE SEGURIDAD

- CCN-CERT IA-06/14 Recomendaciones generales ante ataques ... El objetivo de este informe es recoger ciertas r...
- CCN-CERT ID-17/14 Informe de Código Dañado e IOC de Cri... Critroni es un troyan de tipo Ransomware (bloqueador de si...
- CCN-CERT IS-07/14 Resumen ejecutivo Principales datos extraidos del IS-07/14: incidentes gestionados en el mes de julio ...

[ver más...](#)

HERRAMIENTA PILAR

Procedimiento Informático Lógico para el Análisis de Riesgos (última versión)

[ver más...](#)

CURSOS CCN-STIC

buscar... **Buscar**

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ens

Cybersecurity Architecture and Crisis Management in Spain

**National
Security
Council**



Chair: Prime Minister

**National
Cybersecurity
Council**



**National
Cybersecurity
Action Plan**



**Branch
Plans**

Chair: Director National Intelligence



National CERT



CERT for business & citizens

**Crisis
Management
Plan**



European
Commission



STATE
OF
THE
UNION
2017



CYBERSECURITY



“Cyber-attacks can be more dangerous to the stability of democracies and economies than guns and tanks. [...] Cyber-attacks know no borders and no one is immune. This is why, today, the Commission is proposing new tools, including a European Cybersecurity Agency, to help defend us against such attacks.”

European Commission President Jean-Claude Juncker, State of the Union Address, 13 September 2017

Resilience, Deterrence and Defence: Building strong cybersecurity in Europe

terrorism in the digital age

Terrorist groups use cyberspace for tasks that do not imply direct commissioning of attacks, but rather radicalising, recruitment, logistics work and propaganda.

terrorism in the digital age

Intelligence

vs

Cyberterrorism

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Riyadh, 19 October 2017

Alert System National CCN-CERT

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Real Casa de la Moneda
Fábrica Nacional de Moneda y Timbre
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DIRECCIÓN GENERAL DE ORDENACIÓN DEL JUEGO

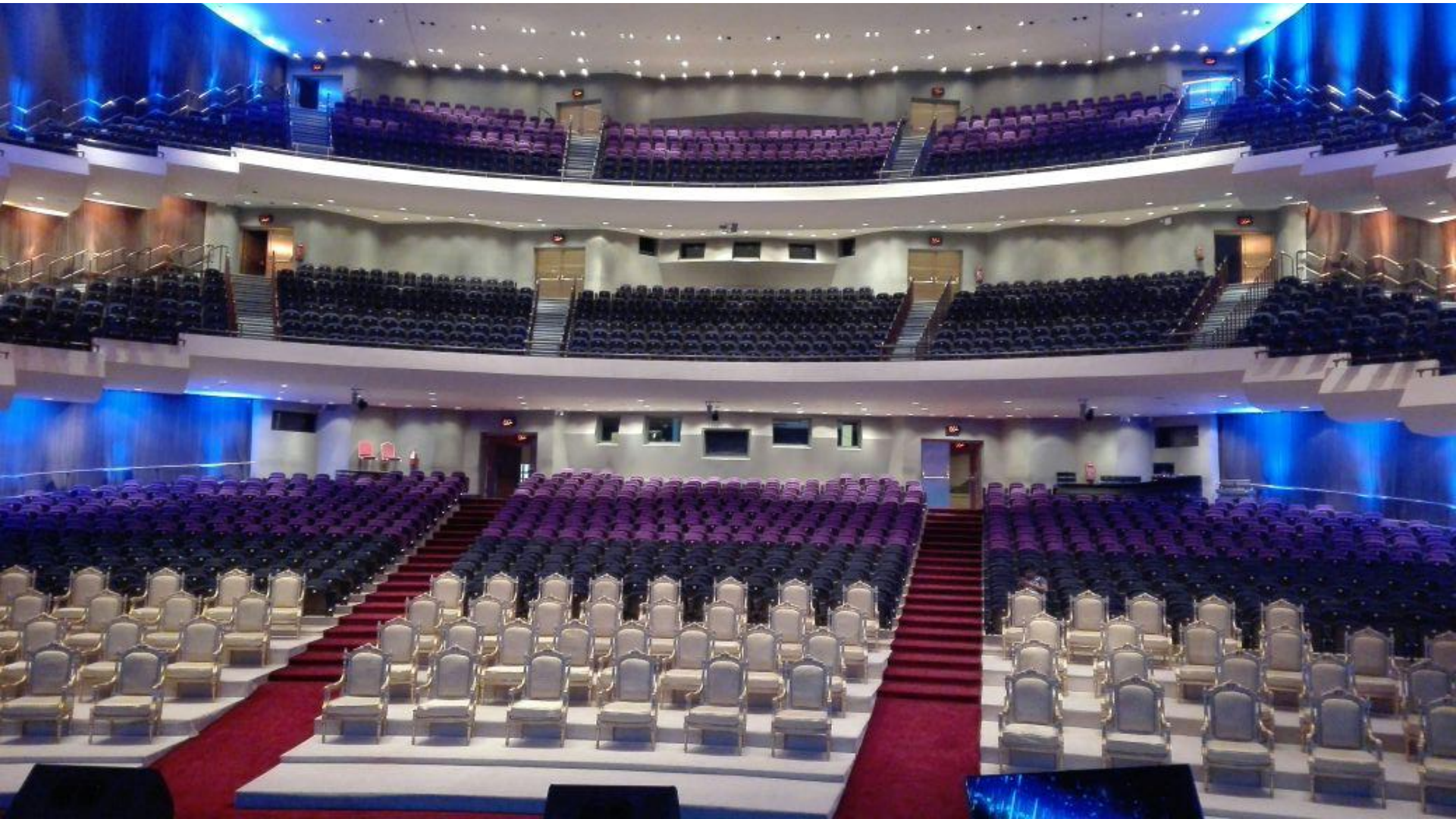
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www.asturias.es
Castilla-La Mancha
GOBIERNO DE CANTABRIA
Gobierno de Canarias
Gobierno de La Rioja

10 COMPAÑÍAS ESTRATÉGICAS



European citizens and businesses rely on digital services and technologies:

Europeans believe that digital technologies have a positive¹ impact on:



75%

our economy



64%

our society



67%

our quality of life



86%

of Europeans believe that the risk of becoming a victim of cybercrime is increasing.²

Sectors like **transport, energy, health** and **finance** have become increasingly dependent on network and information systems to run their core businesses.

The **Internet of Things (IoT)** is already a reality. There will be **tens of billions** of connected digital devices in the EU by 2020.³

Cyber incidents and attacks are on the rise:



+4,000 ransomware attacks per day in 2016.



In some Member States **50%** of all crimes committed are cybercrimes.

+38%



Security incidents across all industries rose by **38%** in 2015 – the biggest increase in the past 12 years.



80% of European companies experienced at least one cybersecurity incident last year.⁴

+150 countries and **+230,000** systems across sectors and countries were affected with a substantial impact on essential services connected to the internet, including



hospitals and ambulance services.