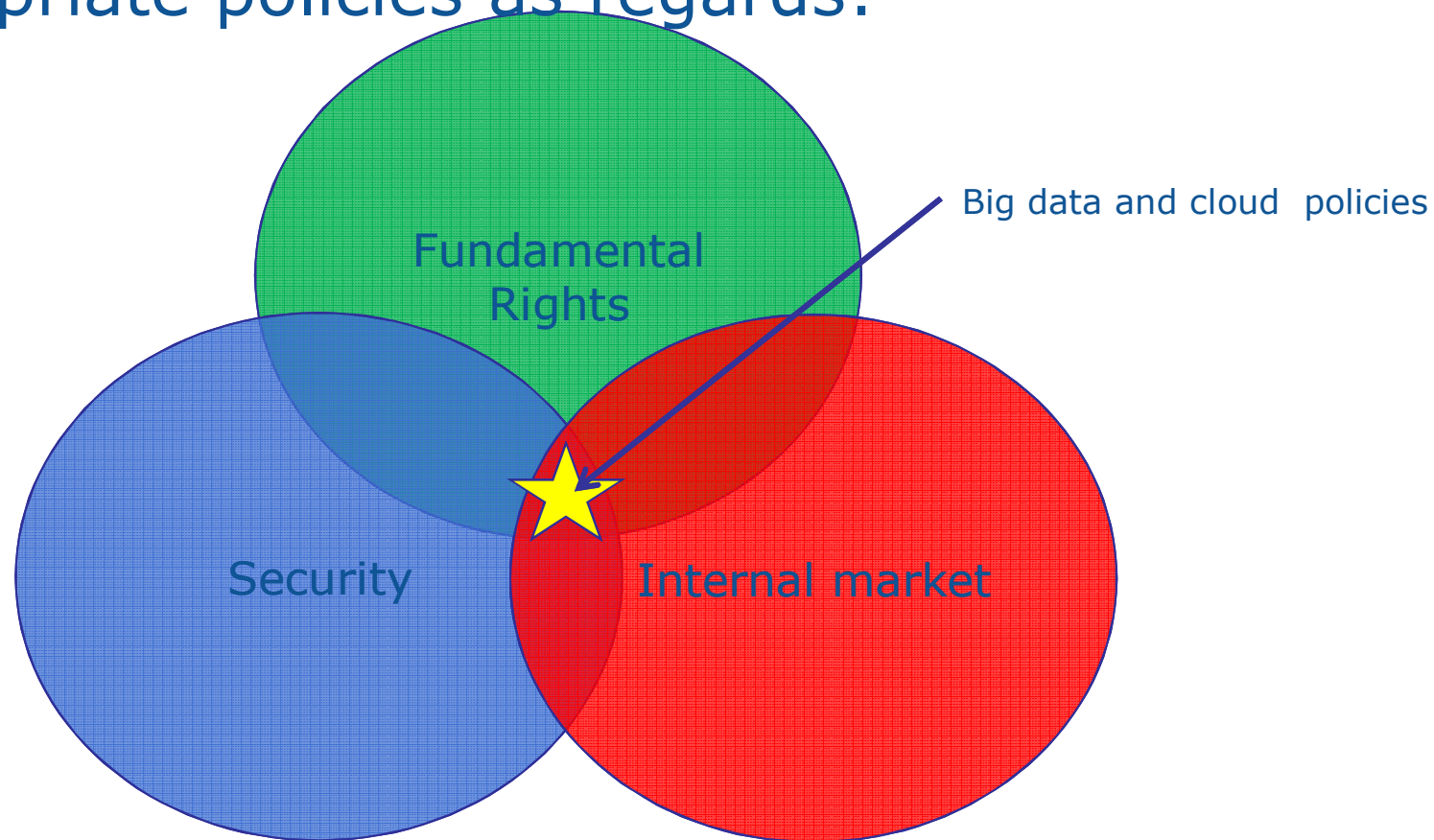European Commission

Big data and Cloud

Providing a consistent legal framework to ensure privacy and data protection for big data and the cloud

Successful cloud and big data policies should build on appropriate policies as regards:

Fundamental Rights

Big data and cloud policies

Security

Internal market

The data protection reform is the cornerstone of those policies

Big data and Security

Exponential growth in the amount of data

Exponential computing and storage (Moore Law)

No exponential growth in security – despite breakthroughs occur from time to time.

Is it mathematically possible to secure an limited amount of data over time? What about an 'infinite amount'?

-> Every week a bigger data breach.

-> Is making all data public really a solution?

Economic impacts ...

legal fragmentation;

non-compliance with the rules, poor enforcement;

lack of trust and lack of control of individuals, economic impact of security and data protection issues;

personal data processing/digitization on democratic expression/plurality/freedom of the medias;

surveillance policies of third countries and EU Mses on the digital single market;

discrimination in the digital single market, based on personal data;

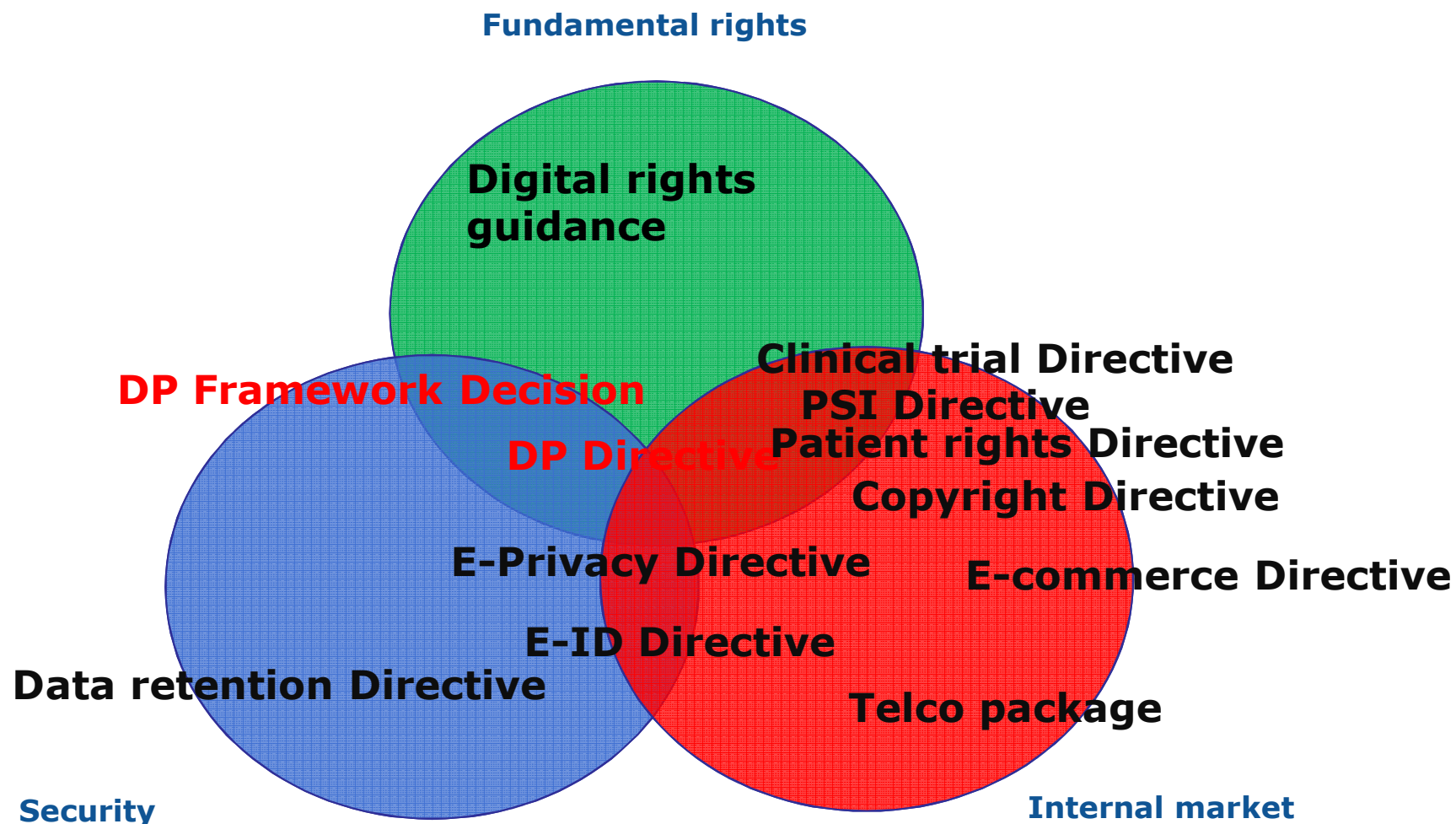*ongoing consolidation/concentration in the digital single market.*

Big data and fundamental rights
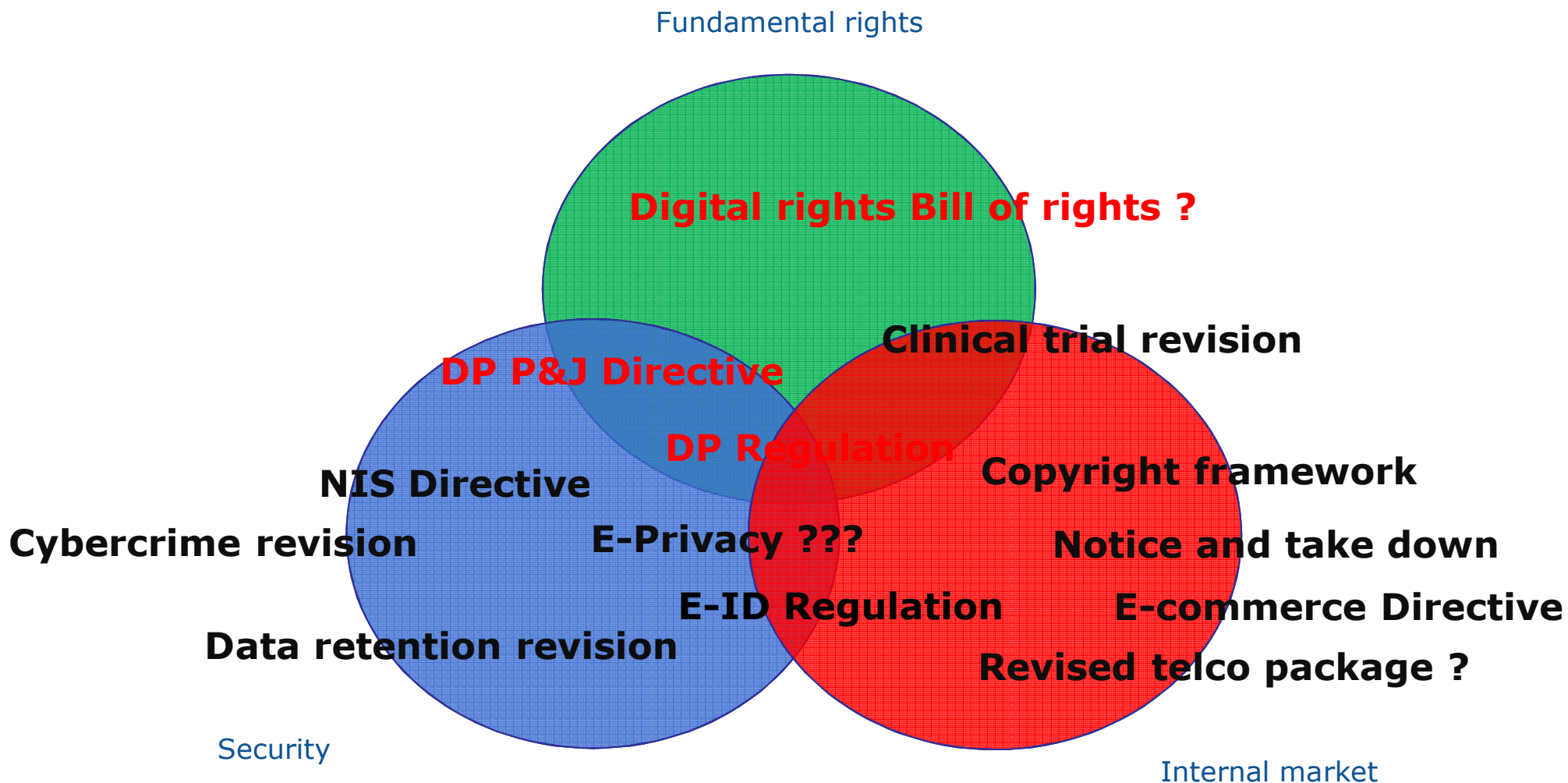
Very little data is enough to destroy your life.

-> How much data is needed to do an identity usurpation.

-> How much money is needed to twist search engine results

-> Correlation based algorithms may lead to discriminations (e.g. US academic research on criminal records)

-> Transparent and open algorithms ???

Existing EU Acquis in the field of 'data'

Fundamental rights

Digital rights guidance

DP Framework Decision

DP Directive

Clinical trial Directive

PSI Directive

Patient rights Directive

Copyright Directive

E-Privacy Directive

E-commerce Directive

E-ID Directive

Data retention Directive

Telco package

Security

Internal market

Future EU acquis in the field of 'data'

The DP Reform is about

1. Harmonisation

2. Digital rights and individual control

3. Risk based approach / less administrative burden

4. Responsibility and liability

5. Globalisation

Key provisions of the Reform related to cloud computing and big data

Article 5 – the principle concur to the treatment of risks.

Article 6 – on purpose specification.

Article 21 – Obligation to assess and treat risks and doing data protection by design and default, taking into account the purpose / pseudonymisation.

Article 26– processors

Article 30 – Security

Article 33 – DPIAs

Article 38 – Codes of conduct

Article 77 – Compensation and Liability

A lot remains to be done

In addition to the DP Reform, COM happy to facilitate work by industry on:

- Code of conducts
- DPIAs template
- Taxonomies of risks and comprehensive cases studies
- Certification and trustmarks
- Standards for terms and conditions, standards for data protection

Already a code of conduct for cloud computing in the pipeline, and a DPIA template for the smart grid industry.

Thank you for your attention

ec.europa.eu/justice
ec.europa.eu/justice/data-protection-reform