

CASD - Secure Data Hub : Secure access to confidential data

Kamel GADOUICHE, Director

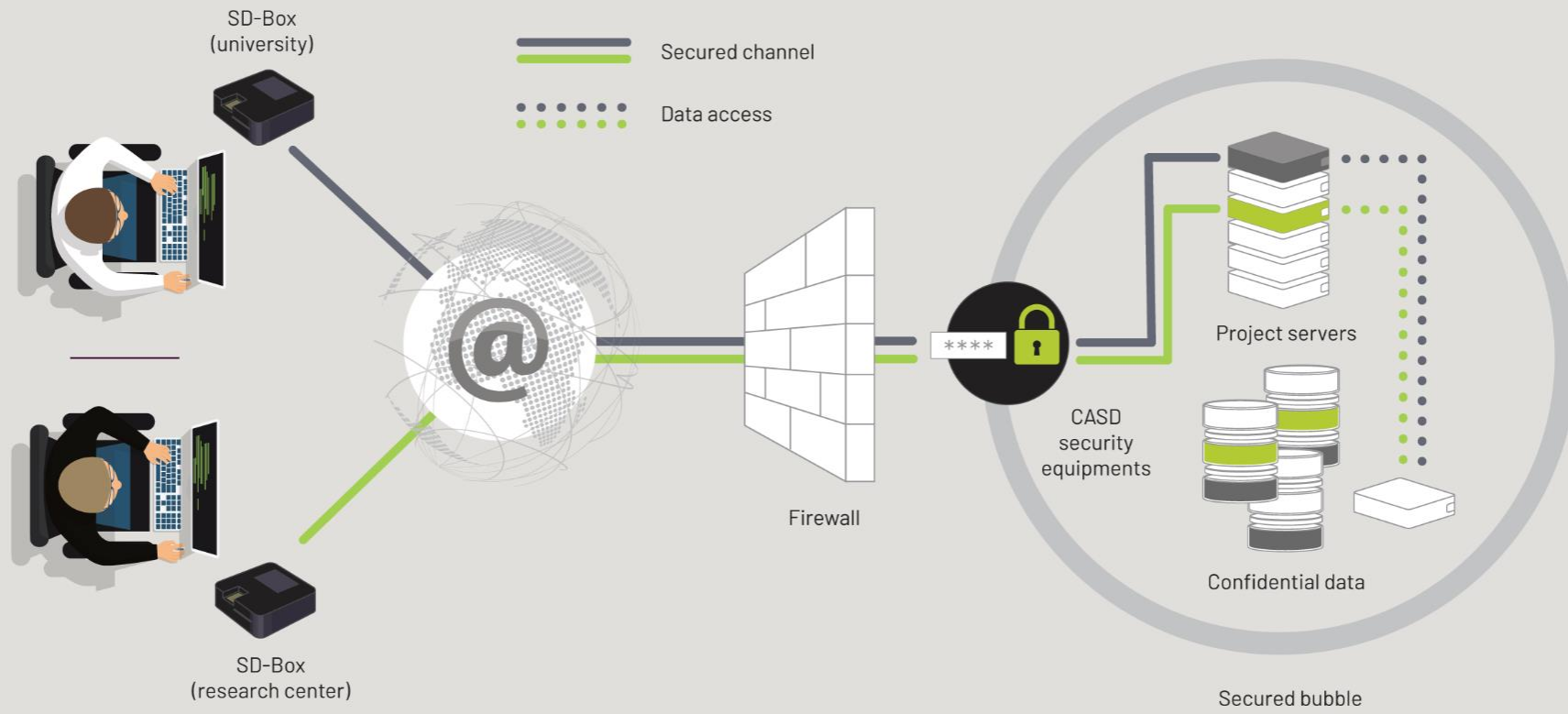
Secure Data HuB



CASD C



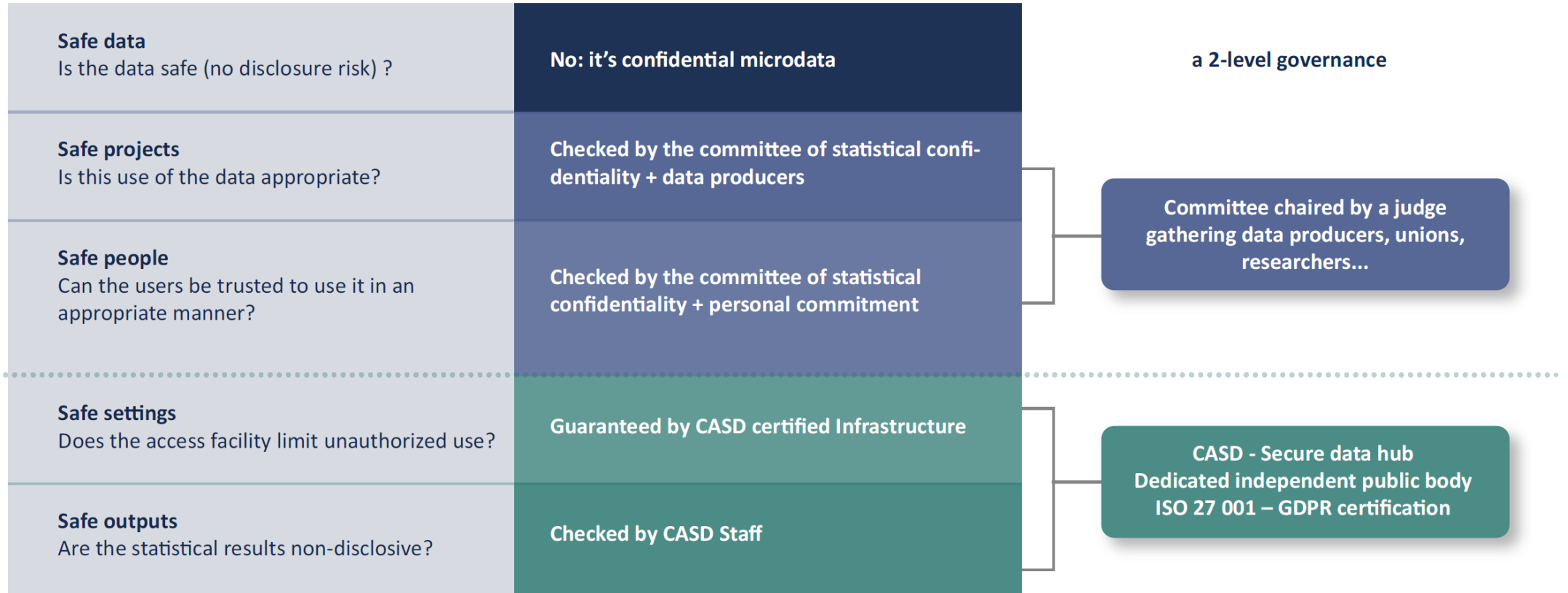
Secured Bubbles





The governance framework for secure use files

decomposed according to the 5 safes (*)

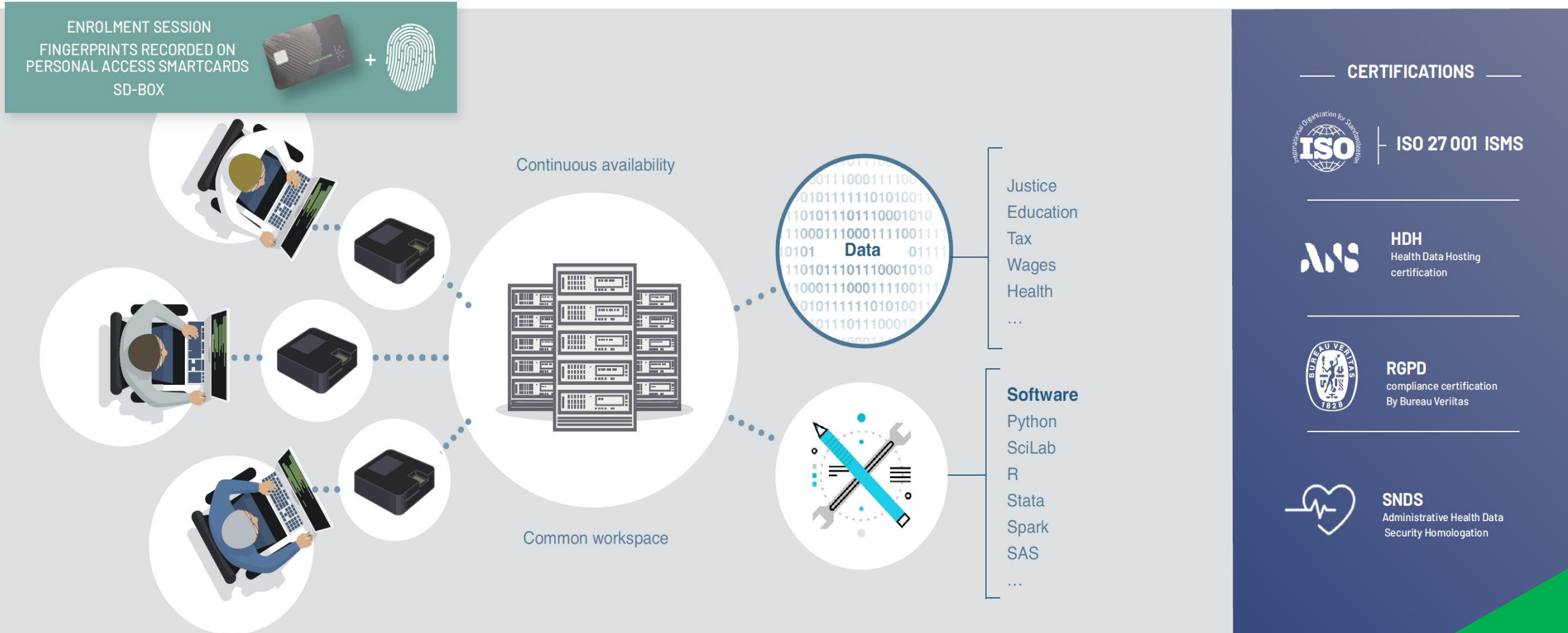


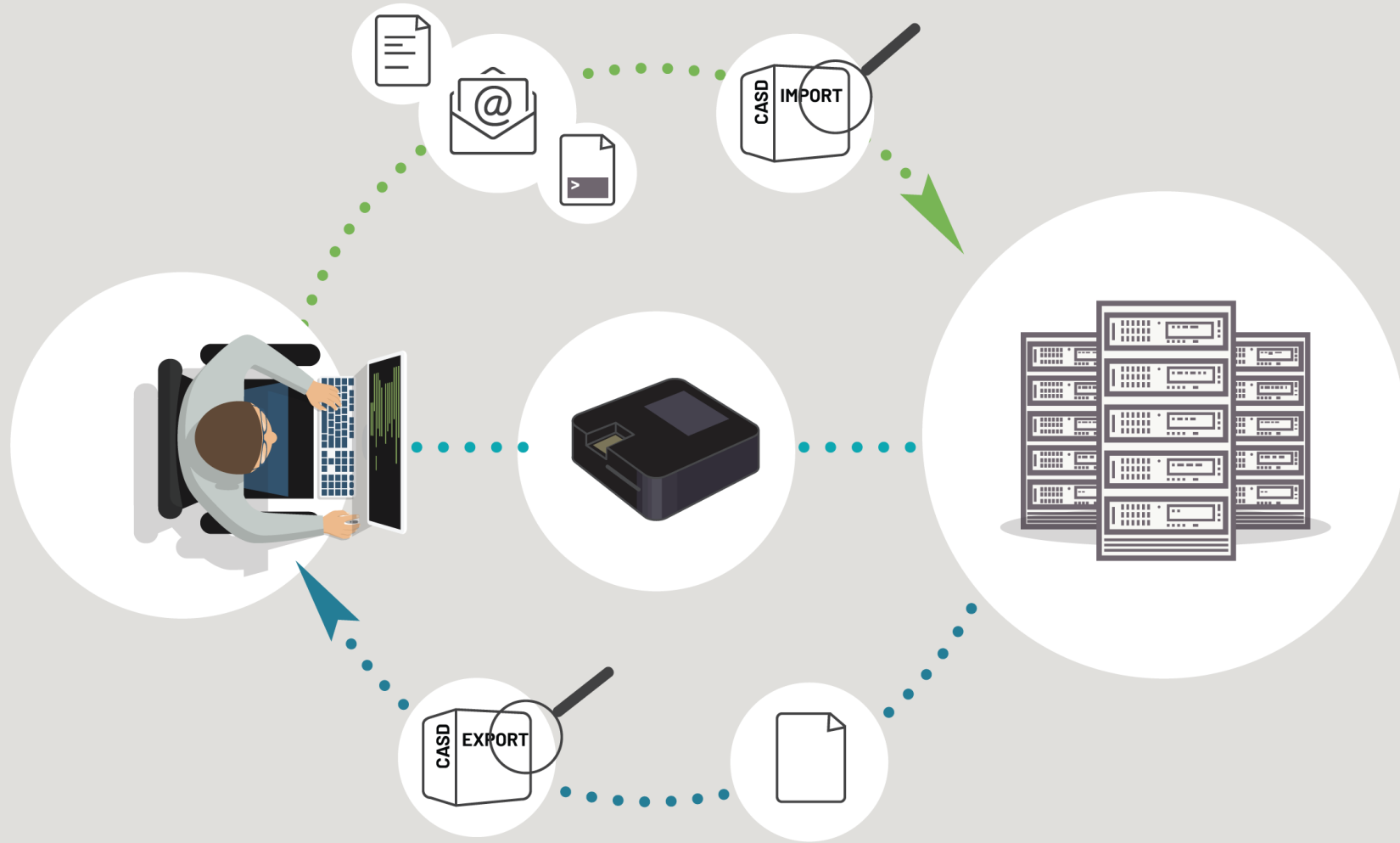
The data producers remain the owners of the data and have the final say: they (ie. DG of NSOs, DG of Tax Directorate) decide who can get access and for which purpose.

(*) Tanvi Desai, Felix Ritchie and Richard Welpton, Five Safes: designing data access for research, University of the West of England, 2016

IT security

CASD provides remote access to a secure virtual research environment with the microdata and a large set of software tools and packages. This secured workspace is only reachable via a specific device, the SD-Box, and a strong authentication process thanks to its built-in fingerprint reader.





The background features a dark blue gradient with intricate white contour lines that resemble topographic maps or data visualization patterns. Small white dots are scattered throughout, particularly along the lines, suggesting data points or nodes in a network.

Confidential datasources

National Institute
of Statistics and Economical
Studies (INSEE)

Ministry of Finance

Ministry of Labour

Ministry of Agriculture

Ministry of Justice

Ministry for Education

Ministry of Environment

Central Agency
for Social Security
Organisations

Public Investment Bank

Hospital Stays

Memento Cohort

National Agency for
Information on Housing
and Lodging



Secure Data Hub

Labour, Employment / 189

Economy, Business, Finance / 267

Society, Justice, Education / 113

Environment, Agriculture / 187

Health / 244

"CASD, a single entry point to a large number of data producers"
"...the whole certification process remains within the CASD environment."
Science

"CASD is an example of the type of infrastructure needed to support this kind of analyses."
"...to grant third-parties access to sensitive health data..."
nature

RESEARCH PROJECTS

SEE ALL PROJECTS +



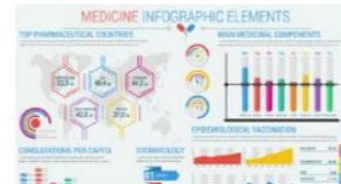
Sensitivity of certain social groups to climate conditions and the vulnerability of households and of geographical areas



International competition and employment











Study on personal data from labor courts



Project carried out by the company named "Capgemini Consulting"

Documentation available on the website

Themes	Families	Series			Datasets	Producer	Authorisation
Filter...	Filter...					Filter...	Filter...
Characteristics of enterprises	Annual Statistics of Companies	FARE : File approaching the results of the Elaboration of annual statistics of companies  The file approaching the results of the Elaboration of annual statistics of companies contains informations about tax reports made in coherence with informations from the Annual Sector Survey.	225	65	2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 	Insee & Ministry of Finance (DGFIP)	Statistical Confidentiality Committee
Characteristics of enterprises	Annual Statistics of Companies	FICUS : Unified Corporate Statistics System  FICUS aims to compile a complete and coherent set of individual data and statistics on enterprises through the exploitation of a fiscal source, which constitutes the "core" of the system and brings together the company profit declarations to the then Tax General Directorate (DGI) now DGFIP.	202	63	1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 	Insee & Ministry of Finance (DGFIP)	Statistical Confidentiality Committee
Employment – Labour force	DADS	DADS Postes : Annual Declaration of Social Data - job position data  These files describe the workstation, employee individual characteristics and more information on the employer from the Register of enterprises and establishments.	200	87	1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 	Insee	Statistical Confidentiality Committee
Characteristics of enterprises	LIFI	Enquête LIFI : Financial Links between Enterprises Survey  This survey aims to identify and outline the groups of enterprises operating in France. European regulations on national accounts require account identification of French enterprises under foreign control, most often by foreign groups. Capital holding links between enterprises are recorded on 31 December in order to constitute groups of enterprises and establish statistics concerning these groups and the enterprises within them.	131	43	1985, 1986, 1987, 1989, 1990, 1991, 1992, 1993, 	Insee	Statistical Confidentiality Committee

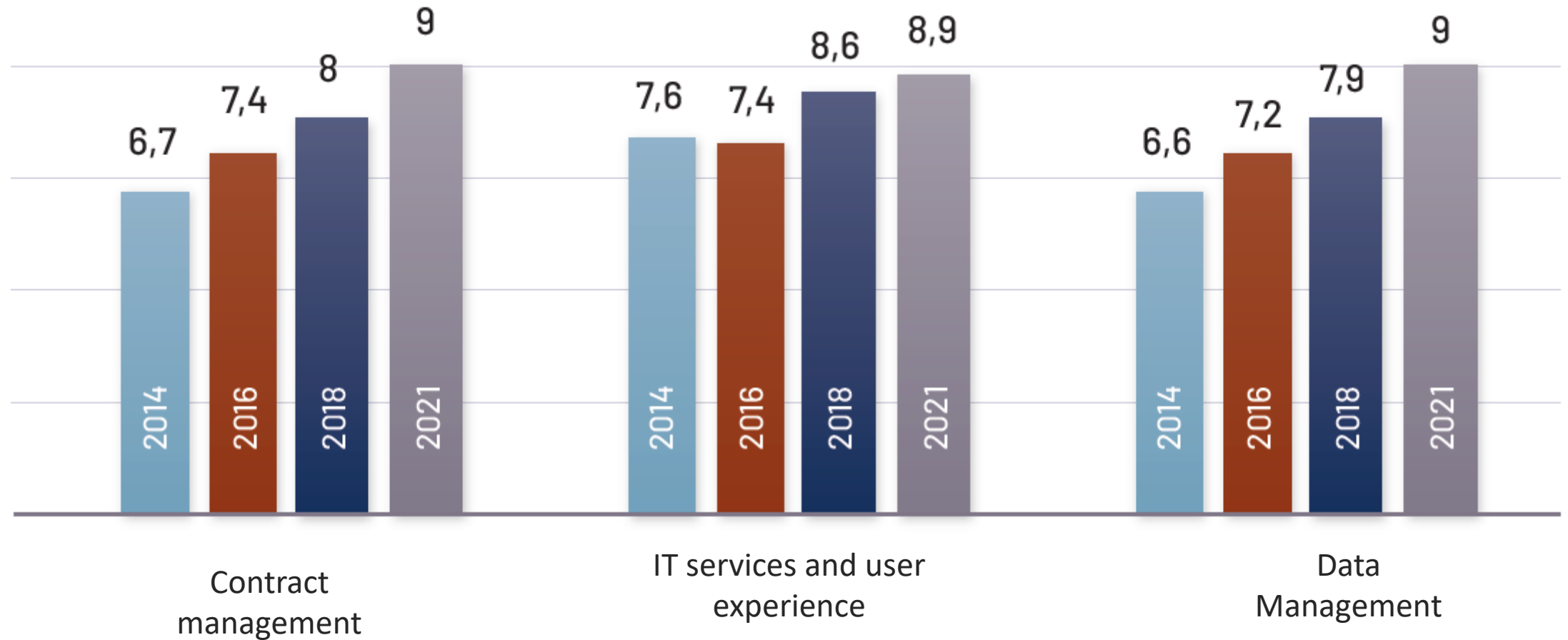
Articles (65)

- Financiarisation et fractures socio-spatiales
- Does outward foreign direct investment affect domestic real wages an investigation using French micro data?
- The jobs at risk from globalization the French case
- Les RH, clé de l'internationalisation des entreprises françaises
- The March of the Techies: Technology, Trade, and Job Polarization in France, 1994-2007
- Techies, Trade, and Skill-Biased Productivity
- Insurance between firms: the role of internal labor markets
- Why are Internal labor markets active in French business groups?
- Trade Shocks and Far-Right Voting: Evidence from French Presidential Elections
- Essays on Local Labor Markets in France



Environment Research and Studies

Feedback from users





Retail networks

Université Jean Monnet - SAINT-ETIENNE - 2015



Analyzing plant protection practices in orchards

CTIFL - PARIS - 2016



Access to employment opportunities in urban areas targeted by "equal opportunity" policies

CNRS - PARIS - 2014



Real Exchange Rate Exposure and Firms' Strategies : Evidence from French Firms

Université Paris Dauphine - PARIS - 2015



Wages and local labor market

Université Bocconi - MILANO - 2017



Geographic localisation of public jobs: determining factors and redistributive effects

CGSP - PARIS - 2018



Innovation and collaborative innovation processes: a dynamic analysis of the French corporate innovative behavior

CNRS - PARIS - 2014



What are the standardization public policies which could efficiently address the environmental stakes linked to food production? A behaviorist approach.

INRA-ALISS - PARIS - 2015



Social status of farmers involved in short food supply circuits' short supply and distribution chains

CESAER - DIJON - 2014



CERGAM - AIX-EN-PROVENCE - 2018



Sustainable towns and the successor project

EIFER - KARLSRUHE - 2018



Knowledge extraction from time and space data through "time and space data mining" methods

IRSTEA - ANTONY - 2017



Explaining the Detailedness of Interorganizational Imitation

Tilburg University - TILBURG - 2017



Studying the erosion of the tax base

DG Trésor - PARIS - 2017



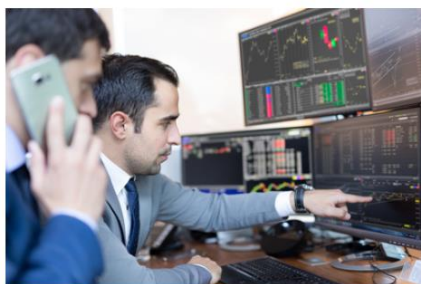
An essay on inequalities and property transfer taxation - France 1980 - 2012

PSE - PARIS - 2017



The costs of research and employment in science: the case for France

IPGP - PARIS - 2017



Innovation, competition and competitiveness, the role of human asset and energy in the dynamic of French companies

Sciences Po - PARIS - 2014



MEMENTO cohort project carried out by INSERM U988

INSERM - PARIS - 2016



Integration of migrants into the French labour market: the importance of geographical factors

OCDE - PARIS - 2018



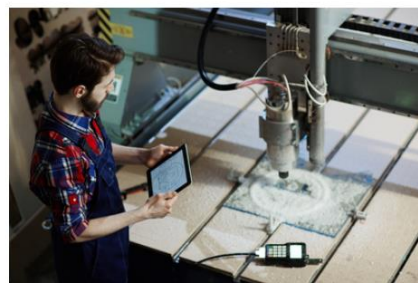
An evaluation of hospital activity

Le Point - PARIS - 2017



Finance, organization of labor and corporate social and environmental responsibility

EconomiX - NANTERRE - 2014



Rapid global growth towards the 2020 horizon

BPI France - MAISONS-ALFORT - 2016



Corporate demographics and their establishments in the Paris region

IFSTTAR - MARNE LA VALLEE - 2017



Corporate organisation, wages and production factor dynamics

UCLA - LOS ANGELES - 2018



Relationship between the inappropriateness prescription and functional and cognitive performances, among early preclinical signs of Alzheimer disease and related diseases patients

Hospices Civils de Lyon -
VILLEURBANNE - 2017



Project carried out by the company named "Carte Blanche Partenaires"

Carte Blanche - PARIS - 2016



Project carried out by the company named "INTUITIVE SURGICAL"

Intuitive surgical - VELIZY - 2016



MEMENTO cohort project carried out by INSERM U988

INSERM - PARIS - 2016



Impact of stress on cognitive and brain biomarkers in Memento cohort

INSERM INSERM CIC1401 -
BORDEAUX - 2017



Project carried out by the company named "OpusLine"

OpusLine - PARIS - 2017



Project carried out by the company named "ALTENSE Consulting"

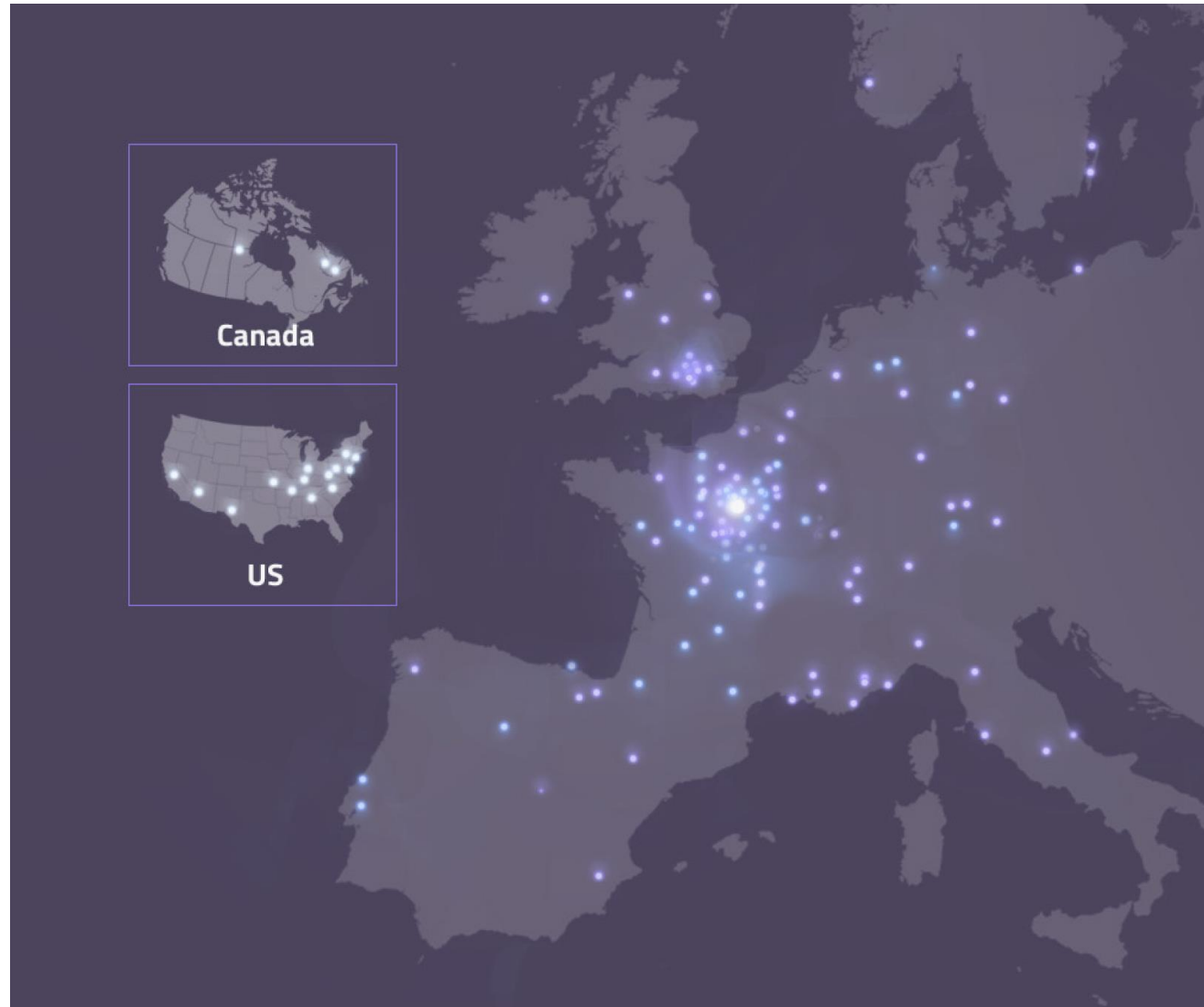
ALTENSE - LANDAS - 2016



Project carried out by the company named "CEMKA EVAL"

CEMKA - BOURG-LA-REINE - 2016

Access for research and studies



Researchers

From France and all across Europe and North America
Currently hosting about 500 research projects
More than 400 publications

Some other institutions :

- The Court of Auditors
 - The Treasury
 - European Central Bank
 - OECD secretariat
-

The annual CASD budget is about 3 M€ with some public fundings
The average annual fee for a standard research project is about 3 000€
The CASD technology is also valued in the private sector



Few words
About CASD

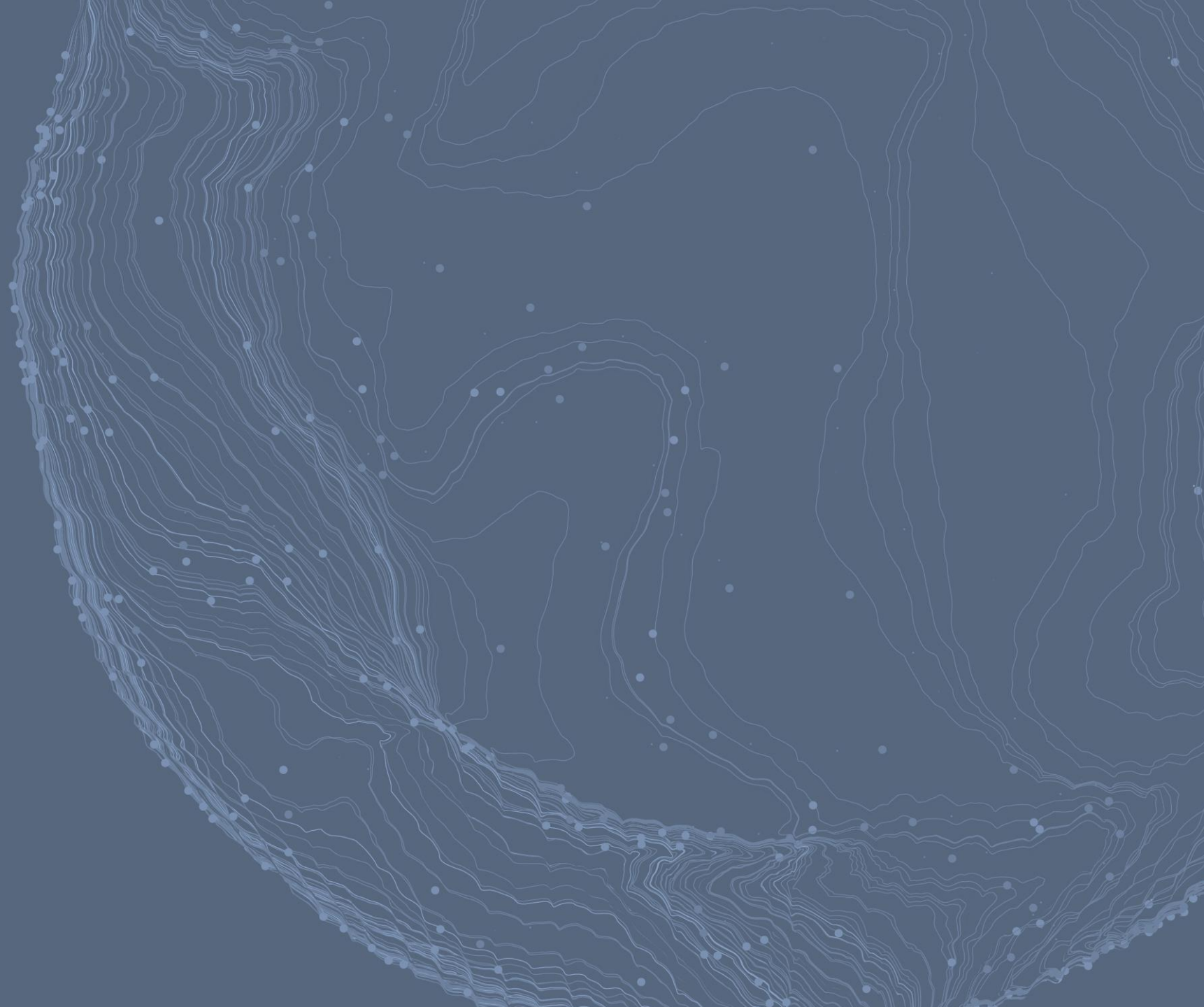


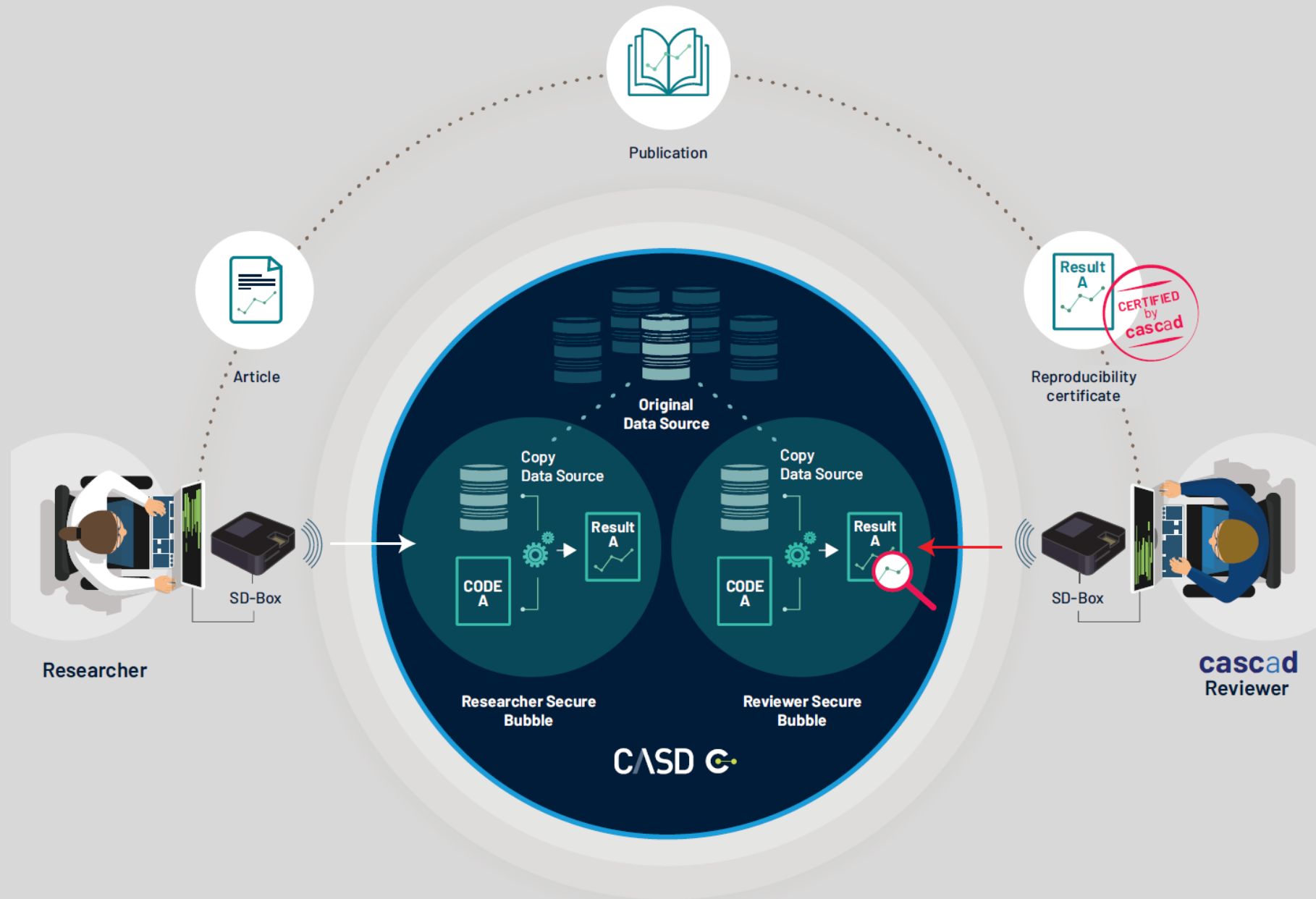
Few figures

- **25** people working at CASD (IT, datascience, data mgmt...)
- **247** confidential data sources
- **1500** users in France and in Europe (UK, DE, NL, SP, DK, CH, etc.)
- **More than 700** projects
- More than **300** publications
- More than **500** access points (Europe, US, Canada)

5

Certification
Results
On
Confidential
Data





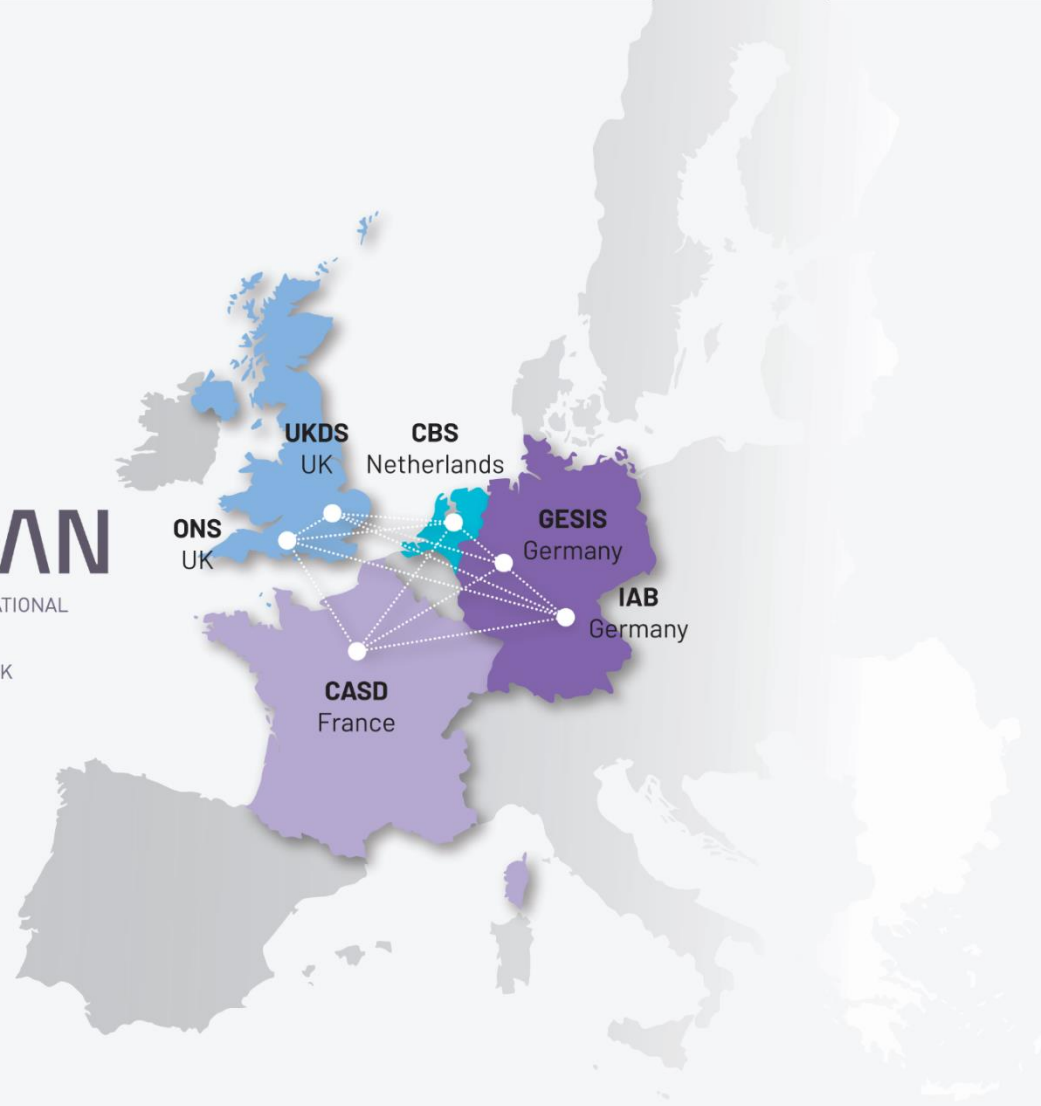


CASD
Member of the IDAN Project



IDAN

INTERNATIONAL
DATA
ACCESS
NETWORK



CASD C



Office for
National Statistics

gesis
Leibniz Institute
for the Social Sciences



UK Data Service

CASD C

Secure Data HuB



all access points

in all partners' Premises





Use of CASD technology

CASD :

A non profit consortium :

- IT engineers for Infrastructure
- R&D engineers
- Datascientists



Acquired Expertise in Diverse Fields:

- 9-year experience in Scientific Research
- Expertise in Information Security
- Expertise in the design and implementation of Computing Infrastructure and Data Management
- Expertise in Customization and Optimisation of Software **for Statistical Processing**



Guarantees

A device recognized by **CNIL** (n°2014-369) French data protection authority



ISO 27001 Certification (Security of Information)
ISO 27701 Certification (data protection)

Regular and Independent Security Audits





CASD

5 AVENUE HENRY LE CHATELIER
91120 PALAISEAU
FRANCE

This is a multi-site certificate, additional site(s) are listed on the next page(s)

Bureau Veritas Certification Holding SAS – UK Branch certifies that the Management System of the above organisation has been audited and found to be in accordance with the requirements of the management system standards detailed below

ISO/IEC 27001:2013

Scope of certification

DELIVERING SECURE SERVICES (ALSO KNOWN AS "SECURE BUBBLES") COMPRISING INFRASTRUCTURE, HOSTING PRIMARY DATA AND ANALYSIS TOOLS, ALL PROVIDED UNDER BIOMETRIC ACCESS, END-TO-END ENCRYPTED CONNECTIONS VIA A SPECIFIC BOX (KNOWN AS SD-BOX) INSTALLED AT CUSTOMER'S PREMISES TO ACCESS CASD DATACENTER.

FOURNITURE DE SERVICES SÉCURISÉS (OU DE « BULLES SÉCURISÉES ») D'INFRASTRUCTURE D'HÉBERGEMENT DE DONNÉES ET D'OUTILS D'ANALYSE, GRÂCE À DES CONTRÔLES D'ACCÈS BIOMÉTRIQUE ET DE CONNEXION CHIFFRÉE VIA UN BOITIER DÉDIÉ (DIT SD-BOX) DEPUIS LES ÉTABLISSEMENTS AYANT CONTRACTUALISÉ AVEC LE CASD.

STATEMENT OF APPLICABILITY: CASD_DDA_ANNEXE_20190710_V1.33

Original cycle start date: 14 November 2019
Expiry date of previous cycle: NA
Certification / Recertification Audit date: 07 November 2019
Certification / Recertification cycle start date: 14 November 2019

Subject to the continued satisfactory operation of the organization's Management System, this certificate expires on: 13 November 2022

Certificate No. FR055849 Version: 1 Revision date: 14 November 2019
Contract No. 7308295

Jean-Michel AUDRAIN, General manager
Signed on behalf of BVCH SAS UK Branch



BUREAU VERITAS
Certification

CASD

Il s'agit d'un certificat multi-site, le détail des sites est énuméré dans l'annexe de ce certificat
5 AVENUE HENRY LE CHATELIER
91120 PALAISEAU - FRANCE

Bureau Veritas Certification France certifie que le système de management de l'organisme susmentionné a été audité et jugé conforme aux exigences de la norme :

Standard

REFERENTIEL DE CERTIFICATION HDS
Version 1.1 – Juin 2018

Domaine d'activité

- MISE A DISPOSITION ET MAINTIEN EN CONDITION OPERATIONNELLE DES SITES PHYSIQUES PERMETTANT D'HEBERGER L'INFRASTRUCTURE MATERIELLE DU SYSTEME D'INFORMATION UTILISE POUR LE TRAITEMENT DES DONNEES DE SANTE ;
- MISE A DISPOSITION ET MAINTIEN EN CONDITION OPERATIONNELLE DE L'INFRASTRUCTURE MATERIELLE DU SYSTEME D'INFORMATION UTILISE POUR LE TRAITEMENT DE DONNEES DE SANTE ;
- MISE A DISPOSITION ET MAINTIEN EN CONDITION OPERATIONNELLE DE LA PLATEFORME D'HEBERGEMENT D'APPLICATIONS DU SYSTEME D'INFORMATION ;
- MISE A DISPOSITION ET MAINTIEN EN CONDITION OPERATIONNELLE DE L'INFRASTRUCTURE VIRTUELLE DU SYSTEME D'INFORMATION UTILISE POUR LE TRAITEMENT DES DONNEES DE SANTE ;
- ADMINISTRATION ET EXPLOITATION DU SYSTEME D'INFORMATION CONTENANT LES DONNEES DE SANTE ;
- SAUVEGARDE DE DONNEES DE SANTE.

Fourniture de services sécurisés (ou de « bulles sécurisées ») d'infrastructure d'hébergement de données et d'outils d'analyse, grâce à des contrôles d'accès biométrique et de connexion chiffrée via un boîtier dédié (dit SD-Box) depuis les établissements ayant contractualisé avec le CASD.

L'organisme susmentionné est également certifié selon les normes

ISO 27001 v2013

Déclaration d'applicabilité : V1.33 datée du 10/07/2019

Date d'entrée en vigueur : 18-Novembre-2019

Sous réserve du fonctionnement continu et satisfaisant du système de management de l'organisme, ce certificat est valable jusqu'au : 17-Novembre-2022

Date originale de certification : 18-Novembre-2019

Certificat n° : FR055852 Version 1 Date: 20-Novembre-2019
Affaire n° : 7308295

Jean-Michel AUDRAIN Directeur Général

Adresse de l'organisme certificateur : Bureau Veritas Certification France
60, avenue du Général de Gaulle - Immeuble Le Guillaumet - 92046 Paris La Défense

Des informations supplémentaires concernant le périmètre de ce certificat ainsi que l'applicabilité des exigences du système de management peuvent être obtenues en consultant l'organisme. Pour vérifier la validité de ce certificat, vous pouvez téléphoner au : + 33 (0)1 41 97 00 60.



CASD

5, AVENUE HENRI CHATELIER
91120 PALAISEAU - FRANCE

This is a multi-site certificate, additional site(s) are listed on the next page(s)

Bureau Veritas Certification France certifies that the Management System of the above organisation has been audited and found to be in accordance with the requirements of the management system standards detailed below

ISO/IEC 27701:2019

Scope of certification

Delivering secure services (also known as "secure bubbles") comprising infrastructure, hosting primary data and statistical analysis tools, all provided under biometric access, end-to-end encrypted connections via a specific box (known as SD-Box) installed at customer's premises to access CASD datacenter.

Original cycle start date: 23 July 2020
Expiry date of previous cycle: na
Certification / Recertification Audit date: 26 June 2020
Certification / Recertification cycle start date: 23 July 2020

Subject to the continued satisfactory operation of the organization's Management System, this certificate expires on: 22 July 2023

Certificate No. FR060159 Version: 1 Revision date: 23 July 2020
Contract No. 8582991

Laurent CROGUENNEC - President,
Signed on behalf of BVCH SAS UK Branch

Certification body address: Le Triangle de l'Arche - 9 Cours du Triangle - 92937 Paris La Défense

Further clarifications regarding the scope of this certificate and the applicability of the management system requirements may be obtained by consulting the organisation. To check this certificate validity please call: + 33(0) 1 41 97 00 60



DELIBERATION n°2014-369 du 25 septembre 2014

Commission Nationale de l'Informatique et des Libertés

- > Nature de la délibération : Autorisation
- > Date de publication sur Légifrance : Jeudi 23 octobre 2014
- > Etat juridique : En vigueur

Délibération n° 2014-369 du 25 septembre 2014 autorisant le groupe des écoles nationales d'économie et statistique (GENES) à mettre en œuvre un traitement automatisé de données à caractère personnel reposant sur un dispositif biométrique des empreintes digitales et ayant pour finalité de sécuriser l'accès aux données mises à disposition dans un centre d'accès sécurisé distant (CASD)

CASD FOR

Two Modes of Technology Use :

- For providing very secure access to external organisations
- For internal needs for secure computing for data management and data analyse

Several Needs can be met with CASD technology:

- Establish a secured **DataRoom** for several remote partners
- Establish a **DataLab** accessible to datascientists (Internal or External) to properly value the data and define « Proofs of Concept »
- **Secure** the **Dissemination of Data** to external consultants or auditors
- **Design** sensitive applications

