



CSR policy in IT

*Positive contributions made by the IT
Department to the company's CSR policy*

November 2022



Cigref

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EDITORIAL

What is a CSR (corporate social responsibility) policy in the IT sector? What actions can be taken in support of sustainable development¹ at the IT department level? Given that in a company, the CSR policy is most often implemented by the department of the same name, what should the IT department's own role be? That is indeed the heart of the matter! Digital transformation is a key issue at all levels in the company. Any CSR initiative should therefore involve the IT department, even if this is not shared, or is not obvious to everyone.

Corporate Social Responsibility (CSR) is defined by the European Commission as the voluntary inclusion by companies of social and environmental concerns in their business operations and in their relations with their stakeholders. France's "Pacte" Law has strengthened and enhanced CSR policy by including it in the civil code: "In their management approaches, companies must take into account the social and environmental issues of their activity. In addition to the voluntary aspect, there is also a regulatory aspect.

IT departments often approach the subject of CSR from the angle of "Green IT", which is the most visible and most widely shared. But for all those who have embarked on a digital sobriety policy, it appears that we cannot limit ourselves to environmental aspects alone and that, very quickly, we are confronted with the societal dimension as part of a holistic approach. Anyone starting to dive into the implementation of an eco-design approach soon discovers the concept of accessibility. This problem may be linked to disability or simply to a difficulty in accessing digital services with electronic devices, connection issues, or because of the complexity of the user journey. In response to that fact, digital technology must be inclusive! IT departments have a powerful social role to play in ensuring that everyone is able to use digital services, regardless of how they access them. The provision of remote services has accelerated over the last two years, which has only reinforced the inequalities and difficulties of access inherent in this situation.

The IT department has another social duty. We cannot complain about the lack of gender diversity if we do not help to make digital professions more attractive to women. And we can contribute to this by arranging internships in the third year, code workshops, etc.: anything that can be linked to the world of education to encourage their access to this sector.

To conclude, the CSR policy in IT needs to be seen as an opportunity for innovation for the IT department, and for adopting a change in working methods for the teams: it is therefore the opposite of a constraint. The challenge is to have a positive impact on society. And this, I believe, is the key!

Annie STEINMETZ – Environmental Performance
Manager, leader of the CSR Policy working group
within IT

¹ "Development that meets the needs of the present without compromising the ability of future generations to meet their own needs"
Quote from Gro Harlem Brundtland, Prime Minister of Norway (1987)

OVERVIEW

In line with Cigref's work on ethics and digital responsibility, the “CSR policy within IT” working group has been studying the positive contributions made by the IT department to the company's CSR policy by examining the positioning and actions of the IT department with regard to social and environmental issues, in its internal practices, for the benefit of other departments, and for its end customers.

The aim of this report is to define the CSR decision criteria to be built into the commitments and decisions of the IT departments and into their support for the business units, based on indicators relating to the various CSR themes (environment, accessibility, gender, etc.).

To define a CSR policy within IT, it is necessary to:

- Clarify the position of the IT Department with regard to CSR and *numérique responsable* (“responsible digital technology”) issues;
- Establish a “responsible digital technology” governance system in partnership with different business units and supported by top management;
- Make the IT Department's commitment a concrete one by opening up to the “responsible digital technology” ecosystem, signing a charter, implementing a labelling process or complying with recognised norms and standards;
- Define the priority CSR criteria for the IT department and develop an action plan: environmental footprint, accessibility, gender diversity and ethics are the most common themes in a digital CSR approach.

Through its expertise and strategic positioning, the IT department can thus actively participate in its organisation's CSR policy.

A good practice guide is provided at the end of this deliverable. It gathers together the key areas specified by the working group, in terms of governance, environmental, social and ethical impact of IT department activities.

ACKNOWLEDGEMENTS

Our thanks go to **Annie STEINMETZ**, Head of Environmental Performance, **AG2R LA MONDIALE** and **Bernard DUVERNEUIL**, CIO of **ELIOR Group**, who led this study, as well as to all the people who participated and contributed to this Cigref working group:

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We would also like to thank all of the participants whose input guided our study:

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This document was edited by **Flora FISCHER**, Mission Director at Cigref with the contribution of the work's managers and participants.

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INTRODUCTION

CSR issues for large organisations are constantly evolving and expanding in the face of climate resilience, accessibility, inclusion and social diversity in the digital world.

The REEN law of 15 November 2021, which aims to reduce the environmental footprint of digital technology in France, sets out a number of new measures, particularly on raising awareness of these issues and limiting software and hardware obsolescence, and should make it possible to drive a new dynamic for training; firstly, in *numérique responsable* (“responsible digital technology”), and secondly, for the deployment of dedicated corporate strategies.

It is increasingly necessary for digital departments to establish a strategic and operational roadmap in order to identify the positive contributions made by the IT department to the company's CSR policy, both in its internal practices and for the benefit of other departments.

CSR contributes to the company's sustainable development objectives by incorporating both environmental and societal impacts. When applied to the digital environment, it raises three issues in particular:

- Accessibility and digital inclusion (people with disabilities, digital divide including lack of skills, digital poverty, etc.)
- The environmental footprint of digital technology
- Gender equality

How can CSR approaches be structured within digital departments? How to manage and prioritise the areas and criteria specific to digital CSR? How to measure the effectiveness of actions and promote the strategy to employees and stakeholders?

Through its strategic positioning and technical expertise, the IT department can initiate key actions at organisational or project level. This report proposes to draw up findings and recommendations, based on feedback from its members, for effective mastery of these subjects in relation to CSR and “responsible digital technology”.

1 STRATEGIC POSITIONING: SCOPE OF THE IT DEPARTMENT'S CONTRIBUTION TO CSR

1.1 AS ITS OWN ENTITY

The question arises as to what scope to take into account when delimiting the CSR actions of the IT department. Is the IT department a contributor to the company's CSR as an entity in its own right (including gender diversity, the digital divide, inclusion through employment in IT professions, etc.), or should it concentrate on its core expertise, and therefore on the technical component of “responsible digital technology”; in other words, for digital technology as a tool only? Or should both aspects be taken into account? The shared conviction is that, while the IT Department must make its contribution and expertise available on “responsible digital technology” issues, in line with its core business, it can make a more general contribution to the Group's CSR policy on other issues that go beyond technical issues, such as gender equality, inclusion and partnership ethics through the CSR values of its stakeholders.

1.2 IN RELATION TO BUSINESS STRATEGY

The IT department's contribution to the company's CSR strategy can be practically implemented as a formal commitment in the form of a labelling process; for example, the signing of a charter (such as the [Responsible Digital Technology Charter](#)² proposed by the INR) or other standardisation processes. The goal is to mobilise and raise awareness among top management and to be able to establish a meaningful strategy with dedicated resources.

Depending on the maturity of organisations, there may be more or less interest in opting for a labelling process. A label not only helps to provide structure and introduce practical measures; it also provides an external and objective viewpoint and benchmarking. More and more large organisations are being labelled by the INR, and by the Agence Lucie. This helps them in establishing a roadmap for the IT department.

Charters, such as the “[Numérique Responsable \(NR\)](#)” charter, which accompanies the “NR Label”, are also excellent vehicles for mobilising teams, and in particular the General Management. “Responsible digital technology” thus becomes an effective corporate approach. For other organisations, the need for labelling is not felt because of their maturity and the cross-functional structure of CSR initiatives. A label will have the advantage of demonstrating evidence of the actions carried out, although compliance with ISO standards (14001, 50001, etc.) may also be considered sufficient to provide a minimum level of proof. However, the requirements of some labels will sometimes be more extensive than what is offered by these ISO standards.

² <https://institutnr.org/charte-numerique-responsable>

The value of the “responsible digital technology” strategy can also be increased with a tool called the “materiality matrix”³. Using the materiality threshold concept, this tool identifies the ethical, social and environmental issues deemed most relevant and significant for the company, because they have a potentially significant impact on its stakeholders, its environment or its economic performance. This enables more accurate targeting and prioritisation of action plans.

1.3 IN ITS ECOSYSTEM (ASSOCIATIONS, COMMUNITIES)

Joining a *numérique responsable* (“responsible digital technology”) community – via associations, think tanks and dedicated events – is an excellent way to gain maturity on these issues. It is also a way of promoting and enhancing the company's approach, and of self-benchmarking.

³ “The materiality matrix is a tool for identifying and prioritising a company's CSR issues. Each issue is prioritised from the point of view of both the company (business) and the stakeholders. Those that are priorities from both perspectives are selected for inclusion in CSR reports” [<https://www.novethic.fr/lexique/detail/matrice-de-materialite.html>]

2 STRUCTURE AND MANAGEMENT

2.1 DEFINITION OF A RESPONSIBLE DIGITAL STRATEGY

First and foremost, it is important to have a clear high-level strategy to ensure that all the resources and means are in place to deploy digitally responsible actions within the IT department and for the benefit of the entire organisation. Integrating “responsible digital technology” into the company's overall strategy is therefore necessarily a task to be performed in conjunction with the IT and CSR departments, and sometimes with departments dedicated to digital transformation.

2.2 RESPONSIBLE DIGITAL TECHNOLOGY GOVERNANCE

For some organisations, governance is based on the CSR department, which sets the group's environmental policy. In this respect, the IT Department applies this policy throughout its entity and with regard to its core business, which is digital. But for others, it is sometimes the responsibility of the IT department to create a strategic and operational roadmap, because the challenges of “responsible digital technology” require the implementation of specific resources (such as tools, awareness-raising) throughout the company.

Whatever the starting position, it is essential for the IT department to define a governance system to manage and evaluate the “responsible digital technology” approach. A governance methodology has been drawn up by the members of the working group below. Among other things, this methodology emphasises the importance of working **in partnership with CSR and other directorates to implement this governance**. In management terms, officers or ambassadors can be appointed in the various business units. Finally, it is important to measure the current situation in terms of environmental footprint and societal actions in order to produce an objective starting plan.

Governance and management of CSR in IT

Requirements

The company must have defined a **CSR policy and associated objectives**, and provided the means for it to be rolled out throughout the company. **The identification of an enabler** or leader within the digital department or IT department is an essential step in **coordinating all the department's contributions to the organisation's CSR policy** and working in tandem with the CSR. The IT department itself defines its CSR strategy, often referred to as “responsible digital technology” approach, including the scope of its action and commitments, and relies on sponsorship from **the Executive Committee** to provide it with the means to implement and monitor CSR/IT actions.

Issues and objectives

- To incorporate a “responsible digital” approach as part of the **digital strategy**.
- **To define the areas and scope of the IT department's contribution to the CSR policy:** carbon footprint, accessibility, gender diversity, QWL (quality of life at work), supplier ethics, purchasing policy, etc.
- **To provide steering and unity for initiatives:** the IT department contributes to achieving the objectives of the company's CSR policy by ensuring that all of its employees, and the business units, are part of the approach. To focus on and prioritise existing initiatives.
- **To define and lead the roadmap** for the IT department's contribution to the CSR policy.
- **To retain and train employees** on the topic of “digital responsibility” so that they actively contribute to the approach.
- **To set achievable targets and monitor progress** by evaluating successes and obstacles.
- **To encourage buy-in from all stakeholders**, in order to guide the choice of partners most in line with the organisation's CSR policy.
- To **apply benchmarks to identify potential areas for improvement**, and prioritise these according to ease of implementation.
- To **monitor the general regulatory environment**.
- **To include “responsible digital technology” in extra-financial statements.**
- **To improve production and delivery processes;** for example, by producing CSR evaluation grids for each project.
- **To report on and publicise** the initiatives introduced in line with the commitments and the roadmap.
- **To contribute to the strengthening of the employer brand** and be a **differentiating factor** for customers.
- **To make the subject of CSR a potential area of innovation**, rather than the restrictive and off-putting image that the term “CSR” could promote.

Management chain, roles and responsibilities

- The management chain is naturally based on the **CSR-IT department partnership**, with initiatives and potentially a community of officers being led by the “responsible digital technology” strategy leader at IT department level. **Coordination with the Group's CSR strategy** will instead be carried out by CSR. The IT department will report its actions to the CSR department.
- The **IT department can also generate proposals** and bring to the attention of the CSR department issues that the latter might not have identified.
- A **dedicated committee** can be set up to monitor, coordinate and arbitrate initiatives, **involving stakeholders** from across the company, including other departments.

Means / Resources

- Set up a **governance committee dedicated to** “responsible digital technology” with the relevant stakeholders (HR, CSR, Marketing, Purchasing, IT, etc.) in order to manage and prioritise all initiatives and mobilise the cross-functional teams.
- Allocate a **dedicated budget** for CSR work in the IT department.
- Include “responsible digital technology” as a **consistent criterion for budgetary governance bodies**.
- Define a **support and training plan** for the actors and officers in the various groups.
- Create the **skills** needed to deploy “digitally responsible” initiatives from a technical and regulatory point of view; external expertise can also be used.
- Encourage a **network of contacts for the actions via officers** in each department, for example.
- Develop an internal and external **communication plan**.
- **Acquire and introduce tools** that will help in the evaluation and monitoring of the measures implemented, in particular on the subjects of the carbon footprint of digital technology or the accessibility of services.

Risks of not establishing governance

- Failure to comply with future regulations.
- Exposure to penalties for non-compliance, depending on the sector and regulatory changes.
- Harm to the company's brand image.
- Lack of attractiveness to talent workers, and difficulty in retaining them.

Conditions for success

The conditions for a successful CSR strategy within IT could be:

- To obtain rapid and significant **results**, creating and sustaining a dynamic among the groups involved;
- **Executive Committee** sponsorship;
- A good presentation of the subject and a **partnership between** internal and external **actors**;
- Provision of **transparent and relevant** information, avoiding approximation and greenwashing;
- Regular **communication** on the progress of initiatives;
- An **operational roadmap**, monitored over time and shared at all levels;

- **Openness** towards the ecosystem in terms of information sharing and community creation (via labels, specialised associations on the subject, etc.): this makes it possible to maintain a good dynamic, to share knowledge, to learn, and to set benchmarks;
- The consistent application of CSR criteria to **arbitrations over IT projects**;
- **The allocation of budgets** and the clear positioning of the main stakeholders in charge of the process (officer, pilot, etc.).

Feedback from Docaposte

Governance of the Responsible Digital Technology sector

The Responsible Digital Technology program was identified by Docaposte as a priority transformation project, and is run in support of all the initiatives already in place at the Group CSR level. The objective is:

- To get all employees involved and to spread the “responsible digital technology” culture;
- To apply the “responsible digital technology” philosophy in our IT systems, our offers and in our daily practices;
- Involve teams outside of IT: CSR, marketing, sales, purchasing, HR, and employees.

Governance is co-managed by the CSR Department and the Transformation Department with the sponsorship of two members of the Executive Committee.

The Responsible Digital Technology programme has a community of ambassadors whose members proactively make proposals at the operational level. The CSR-Transformation team reports to the Executive Committee on the progress of the programme and its proposed actions at a committee meeting dedicated to Docaposte's transformation programmes, then the Executive Committee gives its approval: for example, it approves the roadmap, the measurement projects, etc. The CSR-Transformation team is in charge of the implementation solutions. It is fortunate that this was a decision of the Executive Committee, taken upon the recommendations of CSR.

The 2022 Roadmap is based on the 5 action areas of the INR's NR digital responsibility label:

- Strategy and governance
- Support for the NR strategy
- Digital service lifecycles
- Extending the NR approach
- Products and services of ESNs (digital service companies): ESN-specific products and services

These guidelines are supplemented by consideration of two major challenges for Docaposte: developing **accessible** offers and **eco-design**. To support these actions, Docaposte has recruited a **Responsible Digital Technology Project Manager** who is in charge of the frugality and

accessibility component, including strategic industry monitoring to anticipate the rapidly-changing regulations at French and European levels.

Our experience is that, for this to work, it is necessary to **go beyond CSR and the Transformation Department** to carry out a complete strategy: there is a need to involve the COMEX and the IT departments, who have to be the driving force, and have contact persons. There has been a real difference in the construction of the roadmap since **the IT department has come on board with the CSR strategy**.

Delphine Bénard, CSR Director, Docaposte

2.3 ACCULTURATION & COMMUNICATION

Acculturation and good communication around CSR issues are key factors in the success of a “responsible digital technology” strategy. Offering training or awareness programmes to employees and decision-making bodies is a first step: some companies frequently run workshops on data and digital technology in the broad sense, and “responsible digital technology” is gradually incorporating this aspect of digital awareness. This type of workshop is implemented with teams, individuals and departments, including the purchasing department. Some organisations are starting by running expert-led webinars on the topic of “responsible digital technology” covering different scopes: hardware, eco-design, gender, IS footprint and measurement, or by participating in events such as the Cyber World Clean Up Day.

The tools are also important: for example, one organisation has designed an internal usage calculator, based on a defined scope (excluding travel and building consumption, etc.), in order to make the environmental impact of equipment and usage related to areas such as messaging visible to each employee, with a benchmark enabling them to locate their own performance.

Raising awareness also involves demonstrating the results obtained, illustrating that the CSR approach imposes neither a mental burden nor an additional cost.

There are then several means of communication that allow “responsible digital technology” topics to be promoted internally and to the local ecosystem:

- Establishment of communities of “responsible digital companions” who act as points of contact for these subjects in their respective departments.
- Signing of commitments, such as the “Planet Tech' Care” initiative, the Charter of the *Institut du numérique responsable* (INR), or Club Urba’s Manifesto for Responsible Architecture, to name but a few examples.
- Facilitating individual challenges in agile teams, enlisting support from business owners from the business units (communication, etc.): this adds value and generates publicity on the added value of the CSR approach within IT.
- Focus on compliance with regulatory changes, ISO standards and potential certifications.

The structure and management of the “responsible digital technology” approach is therefore based on three pillars: CSR-IT department collaboration to define the strategy in cases where this is not already in place or incorporated; the search for high-level sponsorship to identify and implement the best actions and measurement or monitoring tools; and lastly, acculturation and support for the operational implementation of the approach.

Now that the organisational matrix has been laid out, what are the priority CSR criteria that the IT department should promote and evaluate?

3 PRIORITY CSR AREAS FOR THE IT DEPARTMENT

Certain areas of CSR are proving to be a priority for IT departments: the majority of organisations will focus on the environmental footprint of digital technology, digital accessibility, gender diversity and ethics.

3.1 ENVIRONMENTAL FOOTPRINT OF DIGITAL TECHNOLOGY

The digital sector currently accounts for 3 to 4% of the world's greenhouse gas emissions. As a first order of magnitude, 70% of the environmental footprint of digital technology comprises hardware and physical infrastructures, essentially in relation to their manufacture and distribution, 20% is from the operation of datacenters and the cloud, and 10% from the uses themselves. This breakdown should enable organisations to target their battles and concentrate their efforts on actions with the greatest impact⁴. The subject can be approached using the following classification: user environment (footprint of computer assets and office automation tools), datacenters, network.

3.1.1 MEASURES WITH THE GREATEST IMPACT

The following initiatives will have the greatest impact on controlling the environmental footprint, and can be taken on by IT departments as a priority:

- **Conducting “digital responsible” purchasing policies**; for example, by including contractual clauses committing suppliers to controlling the energy consumption of solutions, adhering to principles of eco-design and accessibility, their reparability and recycling policy, and **encouraging the reuse** of equipment wherever possible. To achieve this, it is essential to minimise the effects of software and hardware obsolescence⁵.
- Include CSR as a **consistent criterion** (accessibility, carbon footprint, water, responsible purchasing, etc.) **in IT governance bodies** in order to inform the decision-making process of the governance body in question. By considering the actual footprint of IT projects, governance bodies will be able to influence these projects that are being managed or are ready to be launched, to ensure that they contribute to the company's CSR objective⁶;
- **Improve the energy efficiency** of datacenters and promote the use of low-carbon energy for the power they use;
- **Professionalise the IT sector and provide skills training** dedicated to measuring and understanding the environmental impacts of digital technology to ensure that eco-design principles are adhered to at all stages of the IT project life cycle;
- Require cloud providers, as well as manufacturers of all IT and telecom services, to **provide their scope 3 data**⁷, excluding carbon offsetting strategies, but including raw calculation data;

⁴ See “Repository of 100 best practices to support organisations’ approaches to digital sobriety”, Cigref in partnership with *The Shift Project*, 2020: <https://www.cigref.fr/digital-sobriety-a-responsible-corporate-approach>

⁵ This calls for an examination of the economic model of suppliers whose software versioning approaches impose the forced renewal of hardware that is not yet obsolete. Yet these same suppliers advocate the circular economy for the management of datacenters. It would be interesting to apply these same principles to the software market. See Cigref “Software and hardware obsolescence”, 2021: <https://www.cigref.fr/software-and-hardware-obsolescence-recommendations-for-organisations-and-proposals-for-providers>

⁶ More specific work on defining these IT project commitment criteria will be led by Enedis as part of Cigref's 2022/2023 activities.

⁷ Scope 3 includes other greenhouse gas emissions indirectly produced by the organisation's activities that are not included in scope 2, but which are connected to the complete value chain, for example, the purchase of raw materials, services or other products, employee travel,

- Require cloud providers to **comply with** the Greenhouse Gas Protocol and consistently provide information on the **geographical location of their emissions** (Location-Based Emissions) and on **their use of the low carbon or renewable energy market** (Market-Based Emissions);
- **Also take into account the positive externalities** of digital technology to better control the environmental footprint of all the company's activities.

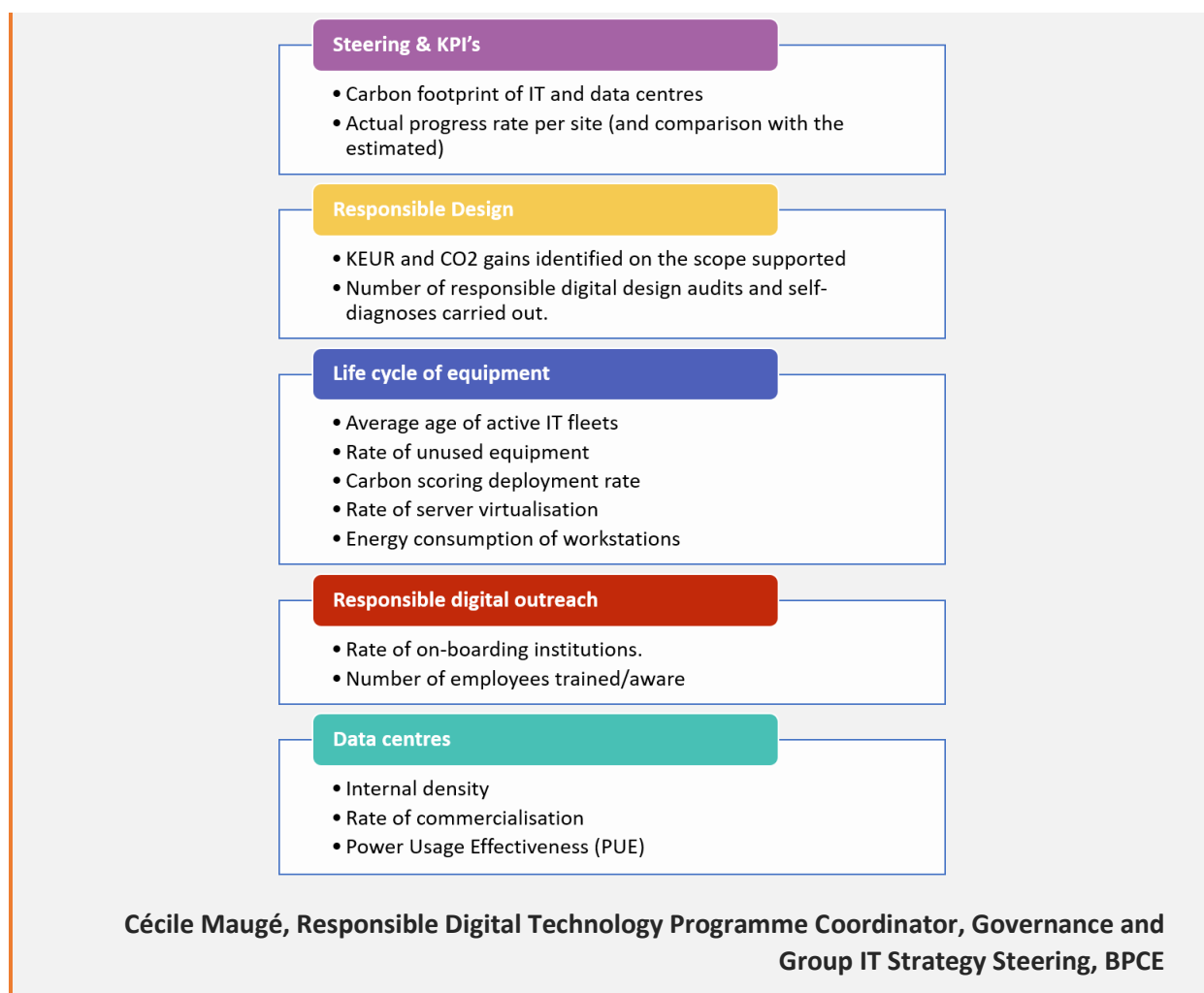
Feedback from BPCE

The responsible digital sector: focus on extending the life of equipment

The BPCE group – a winner of the Responsible Digital Technology Awards in the “Strategy of organisations and responsible digital technology” category awarded by the INR in 2021 – has developed a Responsible Digital Technology system based on four main areas of reducing the environmental footprint of digital technology: responsible design, “responsible digital technology” outreach, equipment life cycle and datacenters. Let's take a detailed examination of the one that is considered to be the most important in terms of carbon footprint: **“Extending the life of equipment and managing end of life in a responsible way”**:

- **Employee environment and infrastructure:** the aim is to optimise and rationalise the number of items of equipment; e.g. by promoting internal reuse, or by improving the energy performance of the equipment pool through carbon scoring. The contributions already made by the implementation of the system have enabled PC lifespans to be extended from 3 to 4 years; a unified solution for putting workstations on standby has been deployed; and equipment has been reused as much as possible when moving sites in Paris.
- **Purchasing:** it is essential to raise the awareness of principals about responsible and sober purchasing by improving consideration of social and environmental responsibility criteria in supplier consultations. In addition, carbon scoring for equipment now makes it possible to measure the GHG impact of a project as early as the call for tenders stage for IT equipment purchases.
- **Access IT:** this involves harmonising hardware and software solutions for the workstations of disabled employees, setting up functional support and providing change support. The group aims to reduce the carbon footprint of IT by 15% and to improve the energy efficiency of datacenters by 10%. To meet these objectives, **indicators have been prioritised for each project**, which should make it possible to monitor the project and measure the economic and environmental benefits.

upstream and downstream transport of goods, managing waste generated by the organisation's activities, use and end-of-life of the products and services sold, fixed production assets and goods, etc.” Scope 2, meanwhile, includes the indirect emissions associated with the production of electricity, heat or steam imported for the organisation's activities. (Ademe)



How such indicators are to be applied at project level is less obvious, but initiatives do exist and are based on tools that are often produced internally and are in the experimental phase.

3.1.2 TOOLS FOR EMPLOYEES, PROJECT LEADERS AND DEVELOPERS

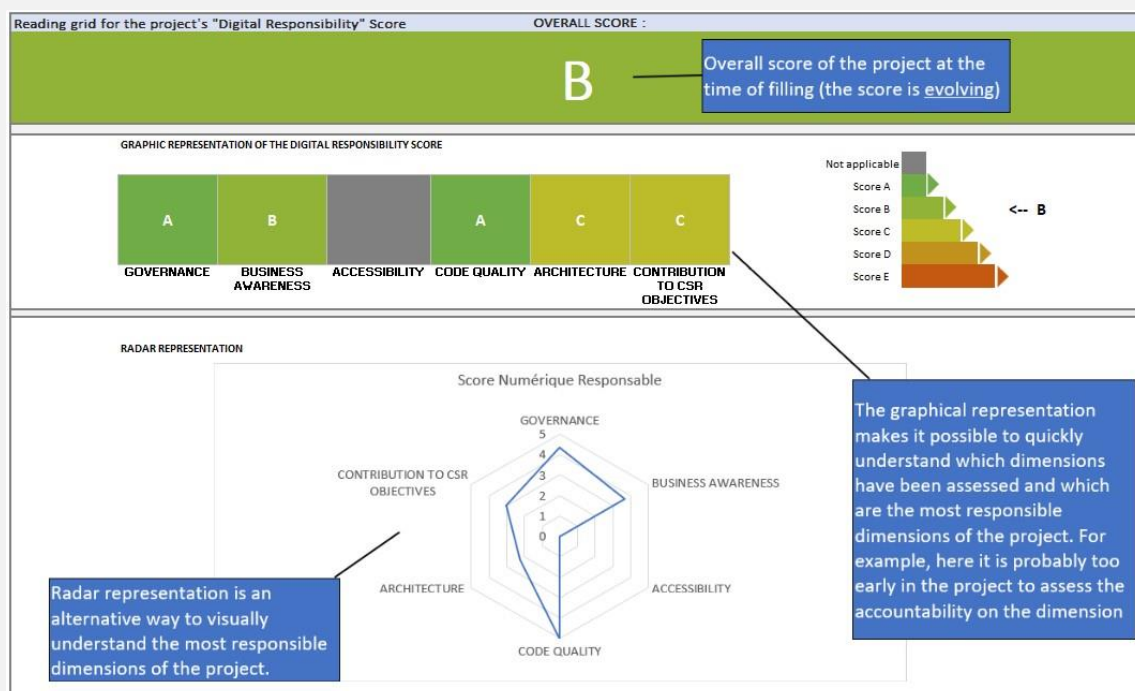
Some organisations have started to study the integration of “digital responsibility” issues among IT project managers. Tools in the experimental phase enable them to obtain an initial “responsible digital technology” score or a method of calculating the environmental footprint for their project, by factoring in purchasing departments, employee travel, etc. Some tools may be complicated to deploy or implement. It is therefore essential to enlist the support of the IT department if possible. But the question arises as to **how they can be consistently integrated into decision-making and evaluation processes for important projects**. Depending on the organisation in question, some **assessments may differentiate** and enable the environmental footprint of a project to be improved on the digital side.

Feedback from ENEDIS

Incorporating CSR criteria into IT projects

There are already many sources of indicators for measuring the environmental footprint of information systems, but in terms of projects we are rather poor. It is difficult to find the human and budgetary resources to measure CSR issues at project level. Moreover, the pitfall of this approach could be to make projects impossible to implement, or to slow down processes. The IT teams at Enedis have worked on a qualitative evaluation methodology, still in the experimental phase, that differentiates between objectives and constraints based on target group (see table in the appendix “Why incorporate CSR criteria into projects?”, p.29). The main question concerns the CSR decision criteria to be incorporated into commitments or arbitration mechanisms for IT projects. How can you make a responsible decision, at the right level of depth and detail, in a pragmatic way, without overcomplicating the workloads of project leaders?

This methodology should result in a “Digital Responsibility” score. The objective of this score is to assess the maturity of the project in terms of “responsible digital technology” good practice. It is a tool that is intended to give IS project managers a relative measurement of the responsible nature of their project, to be completed at the start of the project and throughout its deployment. The themes are: governance, business awareness, accessibility, code quality, architecture, and contribution to CSR objectives. Each theme has criteria that are graded from 1 to 5. The criteria are quality-based. If it is not possible to assess a given criterion, it is possible to select the “not applicable” level, which allows this criterion to be bypassed for assessment. The lowest criterion equates to the least controlled environmental impact (1) and the highest to an initiative with an excellent environmental criterion (5). The higher the score, the more positive the assessment of the “responsible digital technology” maturity. This “digital responsibility” assessment is to be factored in with other criteria: financial, regulatory etc.



Serge Mercadier, Back Office and Energy Transition IT Manager at Enedis

It is also important to consider the development part of the computer code. There are already tools that allow developers to assess their own design, such as on-the-fly code audits, based on certain plugins added into more generic code quality audit tools, which are able to provide indicators and target anomalies in terms of code sobriety. It is now necessary to pursue their general introduction, in open-source mode wherever possible. The Eco-code initiative, supported by Crédit Agricole-GIP, is an initial demonstration of this⁸.

The subject of the environmental footprint of digital technology is increasingly well-understood and dealt with by IT departments, and there are numerous guidelines and documentation to support the process of reducing and measuring the environmental footprint of digital technology. For more details on this issue, Cigref has published its recommendations on the subject in two deliverables for 2020 and 2021: "[Digital Sobriety: a responsible corporate approach](#)"⁹ including a reference framework of 100 good practices, and "[Digital Sobriety: managing the digital environmental footprint through measurement](#)"¹⁰.

3.2 DIGITAL ACCESSIBILITY

3.2.1 THE CHALLENGES OF DIGITAL ACCESSIBILITY

Some **15-20% of the French population is disabled**¹¹ (this proportion is the same worldwide). With the widespread use of digital services to meet everyday needs, digital accessibility is one of the key issues in the CSR policies of digital departments. Government "Defender of Human Rights" Jacques Toubon said in 2019: "***If just one person were to be disenfranchised as a result of digital transformation, it would be a failure***"¹². He referred to the computerisation of public services, which could pose a threat of exclusion.

Digital accessibility means making digital services accessible to people with disabilities. Disabilities can be very varied: motor disability, visual impairment, intellectual or cognitive disability, hearing disability, or multiple disabilities. Most of the people in question will need to navigate without a keyboard or mouse. Some organisations are already required to make their digital services fully accessible, and the law continues to change on this issue:

⁸ The Ecocode challenge, supported by Crédit Agricole – GIP, has set itself a goal of enriching SonarQube (a code scanner) with at least two new rules to enable the integration of the ecodesign dimension in the construction of source code: <https://groupecreditagricole.jobs/fr/notre-actualite/challenge-ecocode-un-record/>

⁹ <https://www.cigref.fr/digital-sobriety-a-responsible-corporate-approach>

¹⁰ <https://www.cigref.fr/digital-sobriety-managing-the-digital-environmental-footprint-through-measurement>

¹¹ INSEE, Handicaps, incapacities, dependence survey, 1998 – 2001

¹² Jacques Toubon, Defender of Human Rights, before the Senate's Social Affairs Committee, as part of its report on the computerisation of public services (January 2019).

Feedback from Empreinte Digitale

Digital accessibility: a regulatory update

Accessibility is already a legal obligation (in France) for certain types of organisations, as stipulated in **article 47 of the Law of 11 February 2005**; i.e. State services and their establishments, local authorities, organisations holding a public service mission, and companies with a turnover of more than €250 million. Their conformity is verified with regard to the **control criteria of the “Référentiel Général d’Amélioration de l’Accessibilité”** (RGAA) reference framework. Refusal to make reasonable accommodations is considered discrimination, and thus subject to criminal sanctions (3 years' imprisonment and a €45,000 fine).

At **EU level, the Goods and Services Directive¹³** must be implemented by Member States by 28 June 2022 (to come into force from 28 June 2025) and will require these new services to be accessible: ticket vending machines and kiosks, e-commerce, computers and operating systems, visual equipment, access services to air, road, rail and maritime transport, payment terminals and vending machines, consumer banking services.

These regulatory changes should prompt all organisations to consider the accessibility of their digital services **starting from now**, and **as early as possible** in the design process.

Simon Bonaventure, Digital Accessibility Manager and Rodrigue Franco, Managing Director – Empreinte Digitale¹⁴, interviewed as part of the Cigref working group.

3.2.2 SOLUTIONS FOR MONITORING AND IMPROVING THE ACCESSIBILITY OF DIGITAL ASSETS

In order to help organisations improve the accessibility of their services, there is a tool called the “multi-annual accessibility plan”: this tool describes, among other things, the objectives, resources, skills to be mobilised, training plans and support to be implemented. **Although organisations are not bound by law, it is useful for improving and monitoring the accessibility of their digital assets.** The multi-annual plan is built around three main parts: the accessibility policy, the intervention plan and the annual plans.

The proposed commitments are as follows:

- Publish this schema to stakeholders and suppliers;
- Designate a digital accessibility officer (or committee);
- Open a reporting channel for people to report a lack or a requirement;
- Modify contractual clauses to require and verify digital accessibility skills as part of the services required;

¹³ https://eur-lex.europa.eu/legal-content/FR/TXT/?uri=uriserv:OJ.L_.2019.151.01.0070.01.FRA&toc=OJ:L:2019:151:TOC

¹⁴ <https://empreintedigitale.coop/>

- Prioritise projects according to various factors: criticality, service provided, number of consultations, short-term redesign, etc.

The intervention plan is then broken down into audits to analyse the strengths and weaknesses of digital applications, with corrective plans for digital accessibility bugs, and training plans for the teams concerned (project management, web design, development, contribution, community management, etc.). In addition to this highly comprehensive tool, organisations can also implement solutions to measure and monitor the accessibility of their services as part of their CSR process:

Feedback: Accessibility scorecard and measurement

One organisation has developed a global scorecard for the accessibility rate of its services. A calculator has been developed in-house and is beginning to be tested out on projects. This is a steering rather than a decision-making tool.

Accessibility is also measurable: according to one organisation *“redesigning an IS that would have been designed independently of accessibility costs 6% to upgrade. It costs nothing, however, to incorporate accessibility criteria as development stake place.”*

Within an organisation, there are many points of contact, which is why **the appointment of an officer or a committee is important** because he or she can interact with:

- General management, to define the policy around digital accessibility;
- The legal department, to modify contractual clauses in contracts, quotations, to prevent risks of discrimination;
- The human resources department, in order to define which resources can be dedicated to digital accessibility, to list and offer training courses, and to create job descriptions;
- Those responsible for project management and producing digital services, in order to check, correct and assess projects with regard to digital accessibility.

Accessibility is involved **from the very beginning of the project, and at all stages of its life cycle:**

- Accessibility is not a bonus or an additional technical “top layer”, but an ongoing practice;
- It must be incorporated throughout the life cycle of a digital service;
- It must be carried out by people (internal or external service providers) who are competent, i.e. trained in accessibility, at each of these stages.

Feedback from Caisse des Dépôts

The tasks of the digital accessibility officer

The tasks of the digital accessibility officer are described in a study by the [Observatoire des métiers du numérique, de l'ingénierie, du conseil et de l'événement](#):

Mission: The e-Accessibility Coordinator is responsible for developing and implementing the digital accessibility strategy of his/her organisation.

Main activities:

- Initiate the implementation and deployment of a digital accessibility approach.
- Implementing indicators and processes for monitoring the performance of the digital accessibility policy and supervising the achievement of objectives.
- Organising awareness campaigns on digital accessibility for stakeholders and increasing competence.
- To monitor and adapt the digital accessibility policy to regulatory and normative constraints.
- Ensure reporting.

Additional activities:

- Participate in the digital accessibility training of colleagues
- Represent the company and promote the actions carried out externally.

It is important to set measurable targets: as the government is doing in the creation of its digital services, a minimum of **75% compliance with the RGAA** – without any stumbling blocks – must be achieved **before going into production**. At the Caisse des Dépôts, this objective is achievable, provided that the process is launched as soon as possible. The project team is also committed to achieving 100% compliance within 2 years. It is also important for us to be prescribers of accessibility. **Digital accessibility** specifications have therefore been drawn up, and are now an integral part of all purchases of external digital services or products. This document aims to give the main design and implementation principles to be implemented by publishers of digital products and services (any type of product or service offering graphical interfaces with users – websites, cloud platforms, mobile applications, e-learning modules, etc.). Accessibility should be part of the selection criteria.

Yann Goupil, Digital Accessibility Officer, Caisse des Dépôts

3.3 GENDER EQUALITY

In 2017, **only 23% of employees in the digital sector were women**. And the situation is not getting any better, as in the same year there were only 16% of female students in higher education in computer science and mathematics. Gender equality in digital professions is an economic, social and societal issue. Firstly, it is essential that women are able to design digital products and services in order to ensure representation for their own expectations and avoid gender bias. Secondly, stereotypes should be overcome by giving women the opportunity to **participate in the growth of the digital sector and to benefit from the variety of job opportunities**.

With the aim of equal opportunities and diversity, it is important for **companies to participate in reinforcing the attractiveness of digital professions for women** and to get involved in the tech ecosystem, whether via associations or schools, in order to offer mentoring schemes, sponsorship, internships, etc

Feedback from AG2R La Mondiale

Communication and awareness-raising on gender equality in digital professions

AG2R LA MONDIALE wanted to get involved in this issue by becoming a sponsor of the Femmes@Numérique foundation¹⁵, which works to promote the role of women in the digital sector; this foundation finances initiatives by associations whose aim is to attract women to this high-growth potential sector.

The IT Department of the AG2R LA MONDIALE Group is therefore taking over the task of raising awareness internally on this issue and sharing information on the projects financed. This has generated a great deal of interest among employees, who have ultimately raised their awareness of the issue on two levels:

- Professional, as they learn about, follow and participate in the Group's initiatives;
- Personal, as parents, as they become aware of the situation.

It was found that this communication channel was a very good way of reaching parents, who are key stakeholders in their children's choice of career path. Thanks to the deliverables provided by the projects, the IT department implements the initiatives in-house by:

- Raising the profiles of women in digital professions (videos, role models, mentoring, etc.) as an inspiration to others.
- Developing the 3rd year observation courses on digital professions with a schedule consisting of a morning “observation” and an afternoon of “fun activities”.
- Organising introductory code workshops for employees’ daughters (8-12 years).

Annie Steinmetz, Head of Environmental Performance, AG2R LA MONDIALE

3.4 ETHICS

IT departments are also required to deal with issues relating to the **design of digital services** and their internal **use, the explicability of machine learning models**, and **quality of life at work** issues linked, among other things, to the spread of hybrid working approaches.

These issues are more difficult to address because they are complicated to objectively assess and measure. The process is still in its infancy. The challenge is to educate and raise the awareness of the teams, with the help of external stakeholders, but the involvement of employees in questioning their

¹⁵ <https://femmes-numerique.fr/>

own working practices is sometimes more fruitful as we seek to develop guidelines that are accepted by everyone.

An initial collection of good practices on digital ethics was carried out by Cigref and numeum in 2018 in the form of a [practical reference guide for stakeholders in the digital sector](#)¹⁶.

Feedback from EDF

Developing responsible and ethical AI models

Several departments of the EDF Group have worked together to create an internal guide for developing responsible AI processes. Aimed at IS project managers and data scientists, but also accessible to all employees, this guide deals with the major issues – particularly of an ethical nature – to be taken into account when implementing an AI system.

The major issues addressed obviously include questions of ethics and control of AI. Readers of the guide learn how to avoid bias (human or algorithmic) and to see the importance of the explicability of the AI model, i.e. the ability to clearly explain how it works and thus master it. All of this is consistent with future European legislation (the Coordinated Plan on Artificial Intelligence, April 2021).

In particular, the focus is on biases and how to prevent them: first of all, the AI model should be based as much as possible on the use of representative and unbiased data. Solutions for avoiding bias are proposed, such as the implementation of an annotation plan, itself reviewed by a diverse team external to the project, or a list of reliable “debiasing” tools.

It is important to avoid bias, as it can be detrimental to certain groups of people and lead to discrimination.

All these questions – which the EDF guide answers – help to facilitate and encourage the development of ethical and inclusive AI.

Richard Bury, IS and Management Director DTEO & Responsible Digital Technology Programme, EDF

¹⁶ <https://www.cigref.fr/ethique-numerique-un-referentiel-pratique-pour-les-acteurs-du-numerique>

4 BEST-PRACTICE GUIDE

A best-practice guide has been produced to identify the **priority measures** to be implemented for a “responsible digital technology” approach within the digital departments.

This reference framework is not intended to be exhaustive, and in fact includes some reference frameworks already published by Cigref. The aim of this guide is to promote the best practices that have the greatest impact while being relatively simple to implement, whether they relate to governance issues concerning the implementation of a “responsible digital technology” approach, to environmental impact issues or to societal and ethical issues in the digital world.

4.1 GOVERNANCE

4.1.1 STRATEGY AND STEERING

- Integrate digital sobriety into the company’s global strategy in partnership with the IT and CSR divisions *;
- Set up a governance structure dedicated to “responsible digital technology”, by creating a committee with the stakeholders (HR, CSR, Marketing, Purchasing, IT, etc.) to provide steering for all initiatives, prioritise them and engage the cross-functional teams;
- Integrate CSR criteria into the life cycles of IT projects;
- Implement a CSR dashboard within the IT department;
- Obtain sponsorship from top management (a formal commitment can be obtained, for example, through the signing of a charter by a recognised stakeholder).

4.1.2 SUPPORT AND AWARENESS-RAISING

- Encourage a network of action contacts, via identified officers, in each department if possible. These officers will be able to enlist the support of the business units so that they can take on part of the task of raising employees' awareness of the challenges of “responsible digital technology”;
- Produce an internal and external communication plan;
- Define a support and training plan for the stakeholders and officers in the various groups;
- Bring together the stakeholders in the ecosystem and share good practices;
- Raise awareness and demonstrate the benefits of the approach to convince decision-makers and teams and bring them on board

4.1.3 BUDGET

- Allocate a dedicated budget for CSR initiatives in the IT department.

4.1.4 PROJECTS

- Implement an environmental impact scoring tool for projects (build and runphases);
- Integrate “digital responsibility” as a key priority in project portfolio management.

4.1.5 MEANS OF IMPLEMENTATION

- Acquire and deploy tools that will help to assess and monitor the actions carried out; for example on the issues of the carbon footprint of digital technology or the accessibility of services;
- Create the skills needed to deploy “digitally responsible” actions at technical and regulatory level. External expertise can also be enlisted.

4.1.6 SUPPLIERS

- Ensure that environmental clauses are consistently included in all invitations to tender and sourcing;*;
- Incorporate supplier commitment clauses into the contract on the use of renewable energy and/or limitation of the energy consumption by their services*;
- Include contract termination clauses in case of negligence*;
- Regularly audit suppliers (every year), monitor extra-financial agency ratings, ask the most significant suppliers to respond to CDP and/or Ecovadis surveys*;
- Ask suppliers to provide details of their CSR policy, a list of their eco-responsible equipment, the carbon footprint for their company and their “responsible digital technology/digital sobriety” initiatives*;

4.1.7 HR POLICY

- Track and monitor the success of the inclusion projects carried out in the IT sector;
- Offer training (to raise awareness or deliver qualifications) to all employees;
- Enhance the value of “digital responsibility” skills in the various business units, or promote the development of skills in this area;
- Incorporate social and environmental clauses into IT recruitment processes;

4.2 ENVIRONMENTAL

4.2.1 GENERAL

- Measure the environmental footprint of the IS;
- Define quantified objectives in terms of areas such as reduction of energy consumption and GHG emissions.

4.2.2 HARDWARE

- Calculate the sum of CO2e emitted in the manufacture of the equipment purchased during the year;
- Measure the footprint (electricity consumption, GHGs, etc.) of equipment assets, an inventory of which is kept up to date;
- Monitor the average age and failure rates of equipment assets;
- Define an equipment allocation policy for benchmarking equipment and avoiding redundant purchases;
- Contribute to the extension of the life of the equipment and reduce the frequency of replacement;
- Assess the rate of hardware recycling or reuse/recovery of hardware;
- Obtain information on the rate of use of reconditioned material.

4.2.3 SOFTWARE

- Track the proportion of eco-designed applications;
- Measure the carbon footprint of applications (eco-score);
- Measure the environmental footprint per digital service.

4.2.4 INFRASTRUCTURE

- Measure power usage effectiveness (PUE) and monitor the rate of improvement in datacenter energy consumption (reuse of waste heat, etc.);
- Monitor the level of server virtualisation;
- Measure the carbon footprint of the network (even if it is an order of magnitude).

4.3 SOCIAL

4.3.1 ACCESSIBILITY

- Benchmark and monitor the accessibility of digital services;
- Create a digital accessibility officer role or establish an accessibility committee;
- Obtain support (training, advice, audits);
- Set numerical targets and monitor the process;
- Monitor changes in the rate of integration of people with disabilities, both in-house and among suppliers/subcontractors.

4.3.2 GENDER EQUALITY

- Have a policy of influencing and raising awareness of women in digital professions;
- Implement initiatives that contribute to redressing the gender balance in IT professions, and monitor these changes;
- Organise internships for 3rd year students to promote digital careers by encouraging gender diversity;
- Offer code workshops for employees' children to raise their awareness of digital professions.

4.4 ETHICS

4.4.1 RESPONSIBLE DESIGN

- Offer training programmes on the subject of ethics in the creation of digital tools*;
- Help solutions designers to promote diversity and gender equality based on the HR policy ensuring social diversity and gender balance among employees *;
- Train designers on the risks of bias associated with the datasets used for machine learning, and set up verification processes at each stage of development to ensure that the results are free from bias *;
- Maintain a policy of explicability in artificial intelligence systems throughout the chain (data sources, explanation of the reasoning followed), if necessary adopting an approach based on labelling and ethical support *.

4.4.2 ETHICAL USE OF DIGITAL TECHNOLOGY

- Provide all employees with a guide to eco-initiatives *;

- Co-construct and share best practices in the use of social networks with all employees *;
- Apply all the rules of quality of life at work to the digital environment; for example, by maintaining the right to disconnect, by preserving temporal and spatial boundaries between work at home and private life, and by identifying risk situations and evaluating the experiences and feelings of employees in their working methods *.

* Measures taken from Cigref's 100 good practices for digital sobriety ("Digital Sobriety: A responsible corporate approach"¹⁷, in partnership with The Shift Project, 2020).

* Measures taken from the "Digital ethics: a guide for professionals of the digital age"¹⁸ from Cigref in partnership with numeum (2018).

¹⁷ <https://www.cigref.fr/digital-sobriety-a-responsible-corporate-approach>

¹⁸ <https://www.cigref.fr/ethique-numerique-un-referentiel-pratique-pour-les-acteurs-du-numerique>

CONCLUSION

Corporate social and environmental responsibility in the digital age forces us to reconsider the meaning of what we do; and through it, our commitment to climate resilience and a more inclusive world. Far from being a mere image or slogan, CSR is increasingly embodied in the ambitious actions and policies of organisations to improve the environmental footprint of digital technology, to develop services that are accessible to all, to promote gender diversity in the IT professions and to ensure inclusion, among other goals.

IT departments, in partnership with CSR, HR or other business departments, are the parties responsible for the success of such challenges and their operational and strategic implementation within their organisations. They are also entitled to make proposals and participate dynamically in the Group's CSR policy based on key criteria such as the environmental footprint of digital technology, accessibility, gender equality and digital ethics. Their core expertise allows them to propose ambitious policies based on "responsible digital technology", but also to contribute to the group CSR policy already in place. Incorporation of such criteria should not be considered as constraints that will slow down the company's processes, but rather as an opportunity for commitment, innovation and resilience in the face of the global challenges that concern us all.

5 ANNEX

Enedis – “Why incorporate CSR criteria into IT projects? » (see Enedis experience feedback, page 17)

Population	Bénéfits / objectives	Contraints / Key focal points
Decision-making entity	<ul style="list-style-type: none"> Be able to choose the most virtuous projects from a CSR point of view Ensure that CSR issues have been given special attention (architecture scenario, choice of solution / choice of supplier) Predicting the CSR impact of a project, including the environmental impact (carbon impact) 	<ul style="list-style-type: none"> Must fit into the project methodology and be linked to standard deliverables (e.g. decision file) Must be easy to use / low associated workload for the project team
IT department and project team	<ul style="list-style-type: none"> Ensure that the CSR commitments made at the time of the launch decision are respected Knowing the environmental impact of new applications / services To propose a service offer that guarantees to maximise the value of investments (eco-design method) Reduce project and recurrent costs (less equipment / infrastructure optimisation, energy consumption) 	<ul style="list-style-type: none"> Requires "standardisation" of measurement (green, orange, red project) Need to raise awareness and develop the skills of employees (designers, architects, buyers, developers, etc.)
	<ul style="list-style-type: none"> Giving meaning / improving attractiveness and retention of employees 	<ul style="list-style-type: none"> Regarding attractiveness, needs to be visible externally (external communication also impacts retention)
Business lines	<ul style="list-style-type: none"> Improving the user experience Reduce project costs / maximise value of investments (develop only useful features) <p>Note : convergence of eco-design principles with traditional objectives</p>	<ul style="list-style-type: none"> Ces apports doivent être valorisés auprès des métiers These contributions must be valued by business lines Need to develop the skills of employees (designers, architects, buyers, developers, etc.)
	<ul style="list-style-type: none"> Raise awareness of the CSR impact of the new services/applications they request. 	
CSR	<ul style="list-style-type: none"> Include IT in a CSR dynamic and ensure that IT contributes to CSR objectives. Be able to communicate (internally and/or externally) on the contribution of IT to CSR ambitions (e.g. carbon costs avoided through the use of IT) 	<ul style="list-style-type: none"> Must be linked to the company's CSR ambitions (e.g. reducing carbon footprint)
Transverse	<ul style="list-style-type: none"> Ensure compliance with regulatory constraints (e.g. accessibility) 	



Achieving digital success to help promote the economic growth and competitiveness of its members, who are major French corporations and public administrations, and users of digital solutions and services

Cigref is a network of major French corporations and public administrations set up with a view to developing its members' capability to acquire and master digital technology. It is a unifying player in the digital society, thanks to its high-quality thinking and the extent to which it represents its members. Cigref is a not-for-profit body in accordance with the French law of 1901, created in 1970.

To achieve its mission, Cigref counts on three business units, which make it unique.

Belonging

Cigref speaks with one voice on behalf of major French corporations and public administrations on the subject of digital technology. Its members share their experiences of the use of technology in working groups in order to elicit best practices.

Intelligence

Cigref takes part in group discussions of the economic and societal issues raised by information technologies. Founded nearly 50 years ago, making it one of the oldest digital associations in France, it draws its legitimacy from both its history and its understanding of technical topics, giving it a solid platform of skills and know-how, the foundation stones of digital technology.

Influence

Cigref ensures that its member companies' legitimate interests are known and respected. As an independent forum in which practitioners and actors can discuss and create, it is a benchmark recognised by its whole ecosystem.

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