

Volt's Mapping of Policies

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Challenge 1 - Smart State

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Challenge 1 - Smart State

I. Vision

European citizens and residents expect their governments and public institutions to provide effective and efficient, high-quality public services as well as transparent public administrations. Europe, over decades of integration, has set a standard of quality in public provision, allowing for an unprecedented high quality of life for citizens and a unique European social model.

However, in the wake of the economic crisis, growing inequality, and emerging technologies, trust in public institutions has disintegrated, while endemic corruption and inefficiency continue to plague public life.

For Volt, public service is first and foremost intended to serve citizens and residents. We hold as core tenets the principles of management by objectives, transparency, accountability, citizen empowerment, and subsidiarity in the allocation of competencies.

Volt will work to ensure that, across the European Union, public institutions in the Member States are reformed into a modern, forward-looking community with state-of-the-art technology and new thinking to tackle the preceding years of crisis and periods of economic recession, and in some cases, decades of neglect.

In times of transformation, governments must adapt to enable every citizen to fully participate in and contribute to society, and provide for maximal social inclusion and mobility. Digital services should be used when digitisation improves analogue services. Smart States must adopt new tools to earn their citizens' trust through accountable, transparent, and efficient governance. Volt will invest in our common future, including not only innovative public services to cut waste, but also innovative education systems, quality healthcare, and an effective investigative and judicial system to combat corruption. Together, we can use technology for common prosperity.

II. Administrative effectiveness in order to cut waste and improve service quality

Digital technology affects nearly every aspect of our daily lives and must start playing a key role in the way our countries are governed. Volt wants to digitise public services to reduce waste, cut inefficiencies and corruption, ensure transparency and security, and make the State a true servant of its citizens.

A. Digital revolution(A)

Making digital solutions the backbone of our administration provides key tools to improve both internal processes (*back-end*) and external services (*front-end*), reducing inefficiencies whilst strengthening relations between administrations and citizens. Digital tools must be embedded in every policy decision as a means and not an end.

To realise this, we advocate for using proven and emerging technologies to provide public services with a user-centric approach, and to facilitate and monitor transactions as well as citizens' data storage. Examples of innovative services are e-Taxation, digital ID, e-Voting, e-Health, and e-Residency, which can be pursued through emerging technologies such as blockchain ledgers.

1. In public administration

- **Create paperless administration wherever it doesn't yet exist.** Volt will aim to create an infrastructure for completely paperless processes¹ as well as harmonised Information and Communication Technologies (ICT) standards² in order to maintain competitiveness, reduce waste and implement efficient services while increasing interoperability between databases, platforms and applications. Each action pursuing this goal will take into account three elements: organisation, tools, and the government-citizen relationship. New and improved services will be easily usable and accessible from different devices at the same time. Public entities will re-engineer their internal processes, adapting them to new tools, organisations and applications. Finally, services will be interconnected through the use of homogeneous standards.
- **Create safe and effective digital infrastructure to enable innovation.** Improvements in digital infrastructure will be prioritised to meet the future needs of the private sector and of the citizens.

¹ European Commission, Digital Public Services, available at <https://ec.europa.eu/digital-single-market/en/digital-public-services-scoreboard>

² European Commission, ICT standardisation, available at http://ec.europa.eu/growth/industry/policy/ict-standardisation_en

- The introduction of fibre optic networks will be accelerated to boost internet speed; internet coverage will also be significantly improved.³
- City sensors,⁴ community WiFi, and consolidated infrastructures will be implemented to achieve cost efficiency and guarantee service coverage. This will also enable a greater use of shared platforms to provide administrative services (i.e. HR and financial management)⁵ as well as individual services like cloud usage.
- All new technologies will be vetted using a Proof of Concept model to demonstrate their feasibility by testing their practicality before implementation.

2. In e-Governance

- **Foster the adoption of electronic identification and trust services** for electronic transactions and digital signatures,⁶ speeding up processes such as signing electronic rental contracts, accessing confidential files, and submitting online taxation. Blockchain ledgers could foster the diffusion of digital identity across the European Union, and their adoption is supported by using cases and pilot studies that have already taken place.⁷
 - Ensure all pilot studies include requirements for at least two-factor authentication (e.g., through a PIN1, PIN2 system).
 - Certify the authenticity and integrity of digital services in accordance with data protection requirements.
- **Disseminate the Estonian e-Residency model** to enable non-EU actors to set up a business that can operate within the European Single Market.⁸
- **Use big data and predictive analytic systems** to better tailor policies and government services to citizens' needs.⁹ This data should be used during the policy process (where applicable), while at all times upholding the highest standards of privacy and data protection and protecting fundamental rights.

³ For more details, see [Smart State, Guarantee Digital Rights and Freedom, Internet Access](#)

⁴ Smart Santander, Santander Facility, available at

<http://www.smartsantander.eu/index.php/testbeds/item/132-santander-summary>

⁵ Government of Canada, Shared Services Canada, available at

<https://www.canada.ca/en/shared-services.html>; Department of Public Expenditure and Reform of the Government of the Republic of Ireland, An Examination of Shared Services in the Irish Public Service and Internationally, available at

<https://assets.gov.ie/5165/201218160319-a9036a6133464e51a378cc3cf3d27879.pdf>

⁶ European Commission, Digital Single Market, available at <https://digital-strategy.ec.europa.eu/en>

⁷ OpenGovAsia, How the Dutch government is exploring blockchain use cases through many concurrent pilot projects, available at

<https://www.opengovasia.com/articles/how-the-dutch-government-is-exploring-potential-uses-of-block-chain-through-many-concurrent-pilot-projects>;

⁸ Start a Company, Republic of Estonia e-Residency, available at

<https://e-resident.gov.ee/start-a-company/>

⁹ European Commission, Making Big Data work for Europe, available at

<https://digital-strategy.ec.europa.eu/en/policies/big-data>

- **Grant access to and use open data formats to increase government transparency** and provide citizens and enterprises with information that either increases accountability and efficient governance or may be used for research purposes. Organise hackathons where data is made available to allow developers to improve existing IT infrastructure and applications, create innovative solutions, and increase the cyber security of public infrastructure.

3. In Healthcare

- **Diffuse e-healthcare practices at the national level**, ensuring patients' records¹⁰ and their clinical histories can be easily shared among hospitals and general practitioners; and implement Europe-wide e-prescription policies to ensure easy and secure access to prescribed medication for citizens that live, work, or otherwise are abroad.¹¹ Emerging technologies such as blockchain ledgers can support the development of these digital services.¹²
- **Develop a public e-booking system for specialists** to reduce costly waiting lists.

4. In the Legal System

- **Make legal proceedings more accessible.** Governments need to be accountable for each document that is produced with regard to legal proceedings, utilising the emerging technologies to adequately store it and share it with all the involved stakeholders.¹³ Facilitating the right of access to documents or information held by public administrations will make the actions of public bodies transparent and guarantee the protection of legitimate interests and citizens' rights. Moreover, emerging technologies will facilitate the protection of documents and information such as sensitive data or information concerning public order. This would make it more difficult to deny an applicant's request to access in order to protect opaque interests.

¹⁰ e-Estonia, e-health records, available at

<https://e-estonia.com/solutions/healthcare/e-health-record/>

¹¹ e-Estonia, e-Prescription, available at <https://e-estonia.com/solutions/healthcare/e-prescription/>

¹² OpenGovAsia, Blockchain and the public sector - What happened in 2016, available at <https://www.opengovasia.com/articles/7274-blockchain-and-the-public-sector-developments-in-2016>

¹³ OpenGovAsia, How the Dutch Government is exploring blockchain use cases through many concurrent pilot projects, available at <https://opengovasia.com/how-the-dutch-government-is-exploring-blockchain-use-cases-through-many-concurrent-pilot-projects/>

5. In Security

- **Pursue the usage of blockchain ledgers**, such as the Keyless Signature Infrastructure (KSI) Blockchain used in Estonia, to make data manipulation impossible, thus making donations to public actors transparent and traceable.¹⁴

B. Talent and a good reputation

Revive, strengthen, and reward motivation and performance among public sector employees to increase responsiveness to the changing environment and to citizens' needs. Foster an agile environment to stimulate public sector employees' performance, their growth, and career opportunities.

- **Set up innovation-teams within local and central administrations.** Public sector digitisation must be considered as a means, not an end. For this reason, we propose setting up "i-teams"¹⁵ that will develop digital solutions to tackle the most pressing issues in their area of competence and then monitor their implementation. These teams will combine digital and service design competences, ensuring that new tools and services fit citizens' capabilities and needs.¹⁶
- **Facilitate new skill learning in public sector jobs.** Public bodies will provide a wide range of training courses to their employees, enabling them to develop relevant skills such as project management and IT skills that are required in such a rapidly changing environment. All public sector employees will have these competences certified. They can experience and learn from private sector dynamics by participating in "public-private sector exchanges".
- **Open the position-based recruitment system in public administration¹⁷** across Europe to attract talents from all academic and professional backgrounds within ministries and public bodies; people from different careers offer specific skills. Special entry points for young talent may include programmes that offer specific challenges to recruit those who respond best to these tests.¹⁸

¹⁴ KSI Blockchain. See e-Estonia, available at

<https://e-estonia.com/solutions/security-and-safety/ksi-blockchain/>

¹⁵ Nesta, The teams and funds making innovation happen in governments around the world, available at <https://www.nesta.org.uk/report/i-teams-the-teams-and-funds-making-innovation-happen-in-governments-around-the-world/>

¹⁶ The Behavioural Insight Team, Easy Attractive Social Timely, available at

http://38r8om2xjhhl25mw24492dir.wpengine.netdna-cdn.com/wp-content/uploads/2015/07/BIT-Publication-EAST_FA_WEB.pdf

¹⁷ OECD, Acquiring capacity, available at <http://www.oecd.org/gov/pem/acquiringcapacity.htm>

¹⁸ Ministère du Budget, des Comptes Publics de la Fonction Publique, Administration and the Civil Service in the EU 27 Member States, available at

https://www.fonction-publique.gouv.fr/files/files/publications/etudes_perspectives/Administration_and_the_Civil_service_in_the_27_EU_Member_states.pdf

- **Implement a management-by-objectives system** composed of financial and non-financial incentives to improve public sector employees' performance and accelerate the career paths of skilled professionals. Performance will be evaluated based on outcomes.
- **Introduce attractive, fair remuneration and advancement for all** public sector employees as well as high quality entry-level positions in the public sector.

C. Shared competences

Identify and avoid inefficient or ineffective duplication of shared competences at all levels of public administration to clarify accountability and decision-making processes. Decision makers must be accountable to their constituency for the use of public funds and their outcomes. Clear and demarcated competences' allocation between state, regional, and local levels fosters greater accountability from political representatives.

- **Apply the subsidiarity principle** to ensure the most effective and efficient distribution of administrative and legal competences at local, national, and EU levels.

D. Transparent state

Ensure full transparency in the use of public resources: how they are accounted for, where they come from and how they are spent. Monitor tendering processes to make certain that public procurement delivers "best value for money" (BVM).¹⁹ Competitive proposals for the delivery of public services ensure better outcomes for citizens, while a transparent system limits fraud.

- **Exploit the role of the European Court of Auditors in the governance of National Audit Offices** for a better use of public funds, both at the European and national level, aiming to homogenise the public sector accounting standards²⁰ and share best practices among countries²¹ (i.e. production of Whole of Government Accounts (WGA) at a national level).²² The Court should

¹⁹ National Audit Office (NAO), Assessing value for money, available at <https://www.nao.org.uk/successful-commissioning/general-principles/value-for-money/assessing-value-for-money/>

²⁰ European Commission, Eurostat, EPSAS Standard, Overview, available at <https://ec.europa.eu/eurostat/web/epsas/>, Eurostat, Government finance statistics and EDP statistics - Government accounting, available at <http://ec.europa.eu/eurostat/web/government-finance-statistics/government-accounting>

²¹ European Court of Auditors, 2018 ECA Award for research on public sector auditing, available at <https://www.eca.europa.eu/en/Pages/ECA-Award-2018.aspx>

²² National Audit Office (NAO), Whole of Government Accounts 2018-2019, available at <https://www.nao.org.uk/report/whole-of-government-accounts-2018-19/>

be strengthened to ensure that public funds are used to correctly and efficiently implement policies, monitoring coherence between policy design and implementation.

- **Strengthen the ability of national audit offices**²³ to review the activities, size, and objectives of public sector entities and public policy programmes without jeopardising the speed and quality of services. They should conduct periodic independent assessments of all public assets and enterprises to test their effectiveness and increase efficiency, and test innovative public finance and budgeting techniques.
- **Centralise procurement processes** or use aggregation vehicles like framework agreements and consolidated contracts to achieve economies of scale and make processes more efficient. The central platform for public procurement (TED)²⁴ should be integrated within the existing national e-procurement platforms.²⁵ Interoperability and data exchange needs to be ensured in order to enable cross-national bids and to eliminate existing lock-in effects.
- **Improve market knowledge**,²⁶ for instance through research and pre-commercial procurement practices, to better define public sector needs in multi-annual and annual procurement planning.
- **Foster better, more effective, and transparent use of public-private partnerships (PPP)** and results-based outsourcing only in cases of a clear benefit for citizens, when market externalities, such as environmental and societal impacts, accountability, and possible perverse incentives, are accounted for. It is necessary to carry out thorough impact assessments for important outsourcing initiatives with potentially large impacts on public welfare. Public provision of services must also be evaluated on the same thorough basis as PPP.
- **Establish and expand the use of cooperatives and mutuels in the provision of public goods and services** to strengthen democratic accountability, citizen participation, and effective delivery and shared ownership.²⁷

²³ Overview, National Audit Office (NAO), available at <https://www.nao.org.uk/about-us/>

²⁴ European Union, TED home - TED tenders electronic daily, available at <http://ted.europa.eu/TED/main/HomePage.do>

²⁵ European Commission, E-Procurement, available at http://ec.europa.eu/growth/single-market/public-procurement/e-procurement_en;

²⁶ European Commission, Public procurement - a study on administrative capacity in the EU, available at http://ec.europa.eu/regional_policy/en/policy/how/improving-investment/public-procurement/study;

²⁷ European Parliament, European Parliament resolution of 15 June 2017 on a European Agenda for the collaborative economy (2017/2003(INI)), available at

<http://www.europarl.europa.eu/sides/getDoc.do?type=TA&language=EN&reference=P8-TA-2017-0271>, Cooperatives Europe, Vision paper: A cooperative vision for the collaborative economy, available at <https://coopseurope.coop/vision-paper-cooperative-vision-collaborative-economy>

III. Build an enabling education system for the future

Whilst fostering social mobility and inclusion, education is one of the ways **to unite people in a vibrant and dynamic democracy** based on open, pluralistic societies. Europe faces extremely diverse regional education challenges. Volt will ensure that schools are inspiring, safe, attractive, and stimulating workplaces. With the aim of creating **equal opportunities and access to high-quality education**, Volt aims to enable reflective and responsible development for every single child living in the European Union. Volt will also support extracurricular learning as well as informal and non-formal education. **Lifelong learning and vocational training** must be accessible to all throughout their professional and personal lives, in order to offer people opportunities regardless of age. There will be a strong emphasis on early-age education. Finally, there must be **greater investment in European higher education, along with research and development**. High-quality higher education must be accessible and available to everybody, irrespective of background. Education must provide the necessary ingredients for enriching personal development and open up a wide range of opportunities for allowing people residing in the European Union to contribute to society.

In order to build a system that empowers citizens to partake in and contribute to society, education requires major reforms to develop the basic skills for a participatory society, stimulate civic engagement, and foster and reward excellence. As it is Volt's founding principle to design policies based on best practices, we consider Finland's effective school reform as an example to emulate. Its key achievements include an emphasis on pre-primary education; providing resources for high-quality teacher training and adequate pay for teachers; short school hours; and a light homework load; in addition to providing free meals and free transport to school. Volt considers these the foundation for the future of learning. Let's work together to transform schools into an inspiring place for knowledge transfer and enlightenment for students and teachers alike.

A. Pre-primary education

While public institutions will support and complement parents in a variety of ways, parents will always retain the primary responsibility for the welfare and flourishing of a child. The objectives of early childhood education are to support children's growth towards becoming ethically responsible members of society; to provide children with the knowledge and skills necessary in life; and to improve children's learning conditions. Therefore, there is a need to increase its quality and accessibility.

- **Ensure that preschools and kindergartens are accessible to all children for free.**²⁸

²⁸ For more details see Social Equality, Alleviate Poverty, Youth

- **Creative playful pre-primary education:** following the Finnish model, Volt will place a strong emphasis on early education.²⁹ Early childhood education and care programmes (e.g. mentoring programmes) like in Finland provide positive role models and improve children’s development.³⁰
- **Establish rehabilitation working groups made up of representatives** from health care services, members of the voluntary and statutory sectors, child care and family counselling, and the school sector. These groups exist to organise daycare and education for children with special needs and, support the monitoring of growth and learning.³¹
- **Ensure access to programmes for children** under 6, such as speech therapy and support from child psychologists.

B. Primary and secondary education

Particular attention needs to be paid to primary and secondary education as it is a key factor in social inequality. Volt aims to develop a truly comprehensive system that will generate more informed, involved, and empowered citizens to close the inequality gap.

1. Citizens’ Basics

- **Provide free, healthy, daily school meals** to all students to break the cycle of hunger and child poverty. Access to free meals has nutritional, learning, and health benefits and supports productivity and educational success.³²
- **Ensure that high-quality internet connection access and connectivity to technology,**³³ in terms of the fastest available mobile network connections and WiFi, reach rural areas and other marginalised communities as soon as possible. This is absolutely essential for children’s education nowadays, as it provides quick access to information from a variety of sources. However, its use needs to be accompanied by the teaching of critical thinking skills.

²⁹ For more details see <https://minedu.fi/en/early-childhood-education-and-care>

³⁰ Denmark’s forest pre-schools, developed by pedagogues and researchers, are also a best practice. Besides a healthy development, they also aim at developing a responsible use of natural resources. See Growing Wild Forest School, A Brief History of Forest Schools Around The World, available at <https://www.growingwildforestschool.org/post/the-brief-history-heritage-of-forest-schools-around-the-world>

³¹ OECD, Early Childhood Education and Care Policy in Finland, available at <http://www.oecd.org/finland/2476019.pdf>

³² Journal of School Health, Nutrition and Student Performance at School, available at <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1746-1561.2005.00025.x>

³³ For more details see [Guarantee Digital Rights and Freedom, Digital rights.](#)

- **Strengthen the educational system by expanding the funding of public schools** in urban and rural areas. Every child is given the opportunity to attend a well-developed school.
- **Create special integration programmes for migrant children** to help them adapt to a new culture, language, and environment.

2. Innovative approaches and techniques

Make education effective and accessible for a wider range of students' abilities and talents. Investigate long-term trends and regularly update curricula to be in line with our changing societies. Support the development of new tools and education parameters.

- **Invest in research to find better and more creative ways to teach**, like phenomenon-based learning (teaching by topic),³⁴ peer-to-peer learning, experimental approaches, value-based education, and competence-based education to facilitate creativity and imagination. Encourage every child to build on their strengths while securing minimum standards and encouraging children to learn through taking some responsibility, participation and civic awareness.³⁵
- **Introduce new approaches to measure the success of schools**, such as student enrollment and dropout rates; staff retention and professional development; and school connectivity via funding raised from philanthropy; parent engagement and community satisfaction metrics.
- **Incentivise the development of digital skills**, both in early education and in preparation for the professional realm (coding classes; etc.).
- **Strengthen the educational system through improved online courses** and provide the best-needs based education for all, especially for students living in remote areas.
- **Review neuroscientific and biological research papers** on learning, attention, and concentration, e.g. in relation to lesson times, exam times, etc., and try to find new class schedules.³⁶

3. Curriculum reform

- **Ensure English fluency**, as English is one of the undisputed *linguae francae* in international communication, particularly within and between partners of the

³⁴ Phenomenal Education, Phenomenon based learning, available at <http://www.phenomenaleducation.info/phenomenon-based-learning.html>

³⁵ Cats Forum, Children as Actors Transforming Society, available at catsconference.com/

³⁶ UC Berkeley, Poor grades tied to class times that don't match our biological clocks, available at <http://news.berkeley.edu/2018/03/29/social-jetlag/>

EU. Simultaneously, put a greater focus on the mastery of the native language to foster adequate public engagement within local communities.

- **Emphasise STEAM³⁷** subjects that will be supplemented by commonly accessible multilingual digital resources and are actively connected to the arts and creativity. Concurrently, exemplary public and civil society initiatives like WISE (Women in Science and Engineering) that work to empower women and girls in the sector through mentoring and peer-to-peer networks should be expanded.³⁸ Technical education must be used as a tool of social and professional inclusion that enables those who are underrepresented or marginalised in the field to excel, particularly in closing the gender gap in STEM or overcoming socio-economic obstacles.
- **Focus on citizenship education and how a political system works**, from the local council to the national government and the European Union. Make citizenship education a priority.
- **In the final two years of secondary school, make "life competences and responsibility" a mandatory subject** (one hour per week), covering topics such as economics and basic financial literacy, legal basics, social skills, sustainability, healthy lifestyle, and school cooperation with their local environment.
- **Reform educational programmes and curricula so that they actively teach tolerance and intercultural dialogue**, civic engagement, overcoming prejudices, and promoting democratic values. Prioritise courses on gender equality, overcoming gender stereotypes and discrimination, as well as sexual and relationship education.
- **Improve education on mental health and well-being** that must address the challenges that people of all age groups face in a world of constant connectivity, socio-economic marginalisation and online bullying and harassment.
- **Introduce classes on media literacy** that explore creativity and empathy through art forms such as drama, film, and music.
- **Increase the emphasis on learning skills and competences**, e.g., oral communication (also in front of wider audiences), debating and written skills.

C. Teacher satisfaction

³⁷ Science, Technology, Engineering, Arts and Mathematics

³⁸ WISE, Campaign for Gender Balance in Science, Technology and Engineering, available at <https://www.wisecampaign.org.uk/>

Attract more qualified people to become teachers who stay motivated in their job by raising the reputation of and compensation for this important profession.

- **Support annual education summits** held by the European Union.³⁹
- **Reform teacher training by offering more practical experience**, reviewing the conditions of admission and supporting lateral entrants.
- **Pay and compensate** for extracurricular activities and overtime work.
- **Invest in emotional support, counselling, psychological support, and care** for teachers provided by specialised staff and in close collaboration with local medical facilities.
- **Prioritise investments in schools and teachers** in communities facing social exclusion.
- **Encourage and reward long-term teacher commitment.** Give teachers and education professionals more say in shaping education policy.
- **Focus on teaching for and through creativity**, with new work structures and work environments. Introduce assessment models based on 360° feedback.

D. Buildings and Infrastructure

- **Transform education centres into community centres** for the exchange of ideas.
- **Invest in new or renovated facilities and buildings** that facilitate the learning of future-oriented skills, such as networking, where possible within their architecture. Functional versions of these concepts already exist; we just have to spread them all over Europe. One such example is Orestad high school in Copenhagen.⁴⁰

E. Higher and vocational education

In today's world, there is a greater demand for highly skilled and socially engaged people. In the period up to 2025, half of all jobs are expected to require high-level qualifications.⁴¹ Digital technology is making jobs more flexible and complex. People

³⁹ European Commission, Second European Education Summit, available at https://ec.europa.eu/education/education-summit_en

⁴⁰ To have a look at this amazing school building, see 3xn, Can a building help the education process?, available at <http://3xn.com/project/orestad-college>

⁴¹ European Commission, Education and Training, About higher education policy, available at https://ec.europa.eu/education/policies/higher-education/about-higher-education-policy_en

will need to handle complex information, think independently and creatively, use resources (including digital ones), communicate effectively, and be resilient. Creativity and transversality are crucial for personal development and solving societal problems. Every citizen should always have the opportunity to achieve higher levels of education, regardless of the choices they have made at different stages of their lives. Volt aims to revitalise tertiary education with innovative measures to keep pace with new trends.

- **Expand Erasmus+ by significantly increasing its budget** and improving accessibility, outreach, and awareness of the opportunities it provides. Currently, the dissemination of information about the programme is done through DG EAC's⁴² platform, but we want to ensure greater collaboration with national and regional institutions to reach the places that would benefit most from this exchange.
- **Expand Erasmus Pro** for apprenticeships and ensure it reaches people from all walks of life and all socio-economic backgrounds in both educational and vocational programmes.
- **Facilitate intersectoral mobility** between universities and other higher educational institutions on the one hand, and the private and third sector on the other. This would promote the exchange of different perspectives to enable highly qualified individuals to pursue flexible careers.
- **Create a prize for best teacher(s) in the EU.**
- **Open discussions about the design of the university of the future**, e.g., open access for all residents of a given region, and online lectures.
- **Enable students to continue their education** through scholarship opportunities for post-baccalaureate and for older students who wish to continue their education to promote lifelong learning.

⁴² Directorate General for Education and Culture

F. Excellence

Create centres of excellence in selected universities and colleges to gain international recognition, attract talent, foster innovation and create synergies with the private sector where appropriate and relevant, while preserving academic freedom and the integrity of the education system.

- **Invest in universities in economically disadvantaged areas** to attract students and resources.
- **Invest in education centres linked to local crafts and excellence** (e.g. Napoli School for tailors and dairy producers).
- **Involve companies and civil society** in the design of selected courses and seminars to ensure that the required competences are created and to achieve a greater degree of mobility between educational institutions.

IV. Make high quality healthcare available to everyone

In line with the World Health Organisation (WHO), Volt defines health as a state of complete physical, mental, and social well-being rather than merely the absence of disease or infirmity. Mental and physical diseases and disabilities must be destigmatised in a mindful society. Volt believes that an efficient and sustainable healthcare system emphasises prevention rather than treatment and reduces the human and financial cost of disease management.

Based on these principles, Volt aims to create a world-class healthcare system. Volt will invest in improving universal access to healthcare. Everywhere on the continent, it should be possible to see a GP or specialist within a few days and receive timely treatment (and reduce the cost of waiting lists). In addition, access to mental healthcare needs to be improved. Effective e-health tools must become an integral part of healthcare provision to increase access to care. Moreover, Volt will allocate more resources to preventive healthcare, with a special focus on the ageing society, lifestyle diseases, and children's health and resilience. Volt aims to create an efficient healthcare system in which caregivers are empowered to provide the best care based on the needs and wishes of the patient. Overall, closer collaboration between the medical and healthcare professions in relation to physical, mental, and social health will be key to improving the quality and efficiency of healthcare.

A. Alignment of European healthcare systems

- **Ensure universal health coverage and access to healthcare** for all European residents.
- **Develop European guidelines** based on benchmarking and “best in class” performance for **waiting times, diagnostics, and treatments** to improve the quality of healthcare. To this end, Volt proposes to implement a system of annual reviews of public healthcare within a framework of the European Semester (e.g., through co-operation with various research organisations such as the Health Consumer Powerhouse).⁴³
- **Work towards an efficient and high-quality healthcare system**, which requires continuous optimisation of coordination and cooperation between public institutions, healthcare providers and market participants. Healthcare providers should not be (fully) managed by (centralised) bureaucratic authorities, but must be independent and empowered to deliver the highest

⁴³ Each year, a document is published that compares the healthcare performance of every European country. Our national policy teams can adapt to changes more easily with their different priorities and speed. See Health Consumer Powerhouse, Euro Health Consumer Index, available at <https://healthpowerhouse.com/publications/>

quality of care without governments, politicians, and bureaucrats interfering in operational decisions. Instead, a variety of organisationally independent healthcare and insurance providers should enable high-quality healthcare, where operational decisions are primarily made by medical/health professionals with the participation of patients. The state(s) should provide the necessary conditions for healthcare and insurance providers to operate at a high level and establish the legal and regulatory framework for healthcare financing to achieve adequate universal coverage with affordable health care for all (Bismarck style).⁴⁴ Given the multiplicity of healthcare systems across the continent, Volt believes that the optimal public-private coordination and division of tasks must be determined on a country-by-country and case-by-case basis.

- **Ensure pan-European coverage of healthcare services** to facilitate the mobility of European citizens by extending existing healthcare agreements (e.g. by enabling an EU-wide e-booking system for specialised healthcare services using the European Health Insurance Card (EHIC). Our long-term vision is that the EHIC would give EU citizens access to all types of healthcare across the EU.
- **Ensure world-class healthcare by enforcing evidence-based guidelines across Europe.**
- **Introduce further harmonisation** of prescribing and use of medicine across countries by the European Medical Agency (EMA). For example, a first priority is to reduce the large inter-country variation in antibiotic consumption, as the overuse of antibiotics is increasingly leading to antibiotic resistance.⁴⁵

B. Access to healthcare

- **Reduce waiting times by introducing e-booking systems** for specialists, with an investment in more specialists and facilities.
- **Create a multi-professional approach** by supporting the smart centralisation of specialised medical specialities. Medical centres should provide a comprehensive point of contact for patients to consult physicians as well as psychiatrists, psychologists, social counsellors, speech therapists, physiotherapists, and other health professionals. Patients' medical records need to be shared easily, but securely and confidentially between different

⁴⁴ Especially for larger countries the Bismarck system consistently ranks better in performance than the Beveridge systems, as described in the Health Consumer Powerhouse, Euro Health Consumer Index 2017, available at <https://healthpowerhouse.com/media/EHCI-2017/EHCI-2017-report.pdf>

⁴⁵ European Centre for Disease Prevention and Control, Summary of the latest data on antibiotics consumption in the European Union, available at https://ecdc.europa.eu/sites/portal/files/documents/Final_2017_EAAD_ESAC-Net_Summary-edited%20-%20FINALwith%20erratum.pdf

healthcare sectors so that healthcare professionals can provide the best possible treatment to the individual.

- Physical centralisation is primarily required for rural areas; in urban areas, centralisation intelligently connects healthcare sectors through information and communication technologies (ICT).
 - Investments in tele-medicine and e-health are needed to enable efficient and patient-friendly comprehensive contact with healthcare professionals.
- **Set up a European Health Express** for rural areas or areas that do not have good access to healthcare and invest in new ideas like mobile clinics⁴⁶ like those used by the Red Cross or Lifeline Express.⁴⁷
- **Ensure the provision of mental health care services across Europe.**
- Patients should have quick access to mental healthcare professionals through their GPs.
 - Mental healthcare should increasingly be performed via innovative e-health platforms, such as video consultations.
 - Governments should play an active role in promoting mental healthcare. This would lower the threshold for patients to seek mental healthcare and eliminate the stigma attached to mental health problems.
 - Work to eliminate stigma and mystification around mental illnesses like depression, and provide both early and continued support as well as preventive measures.
 - Take a comprehensive, “universal and whole -of- society approach” to mental health based on the World Health Organisation (WHO) Action Plan.⁴⁸ State measures to regulate working conditions with respect to workers’ dignity, work-life balance, working hours, vacation time, and flexibility. Measures should be taken to inform the workforce, support it in times of distress, and monitor the enforcement of workplace policies and guidelines.
- **Ensure sufficient provision of general practitioners and primary care units** in economically disadvantaged areas, especially in rural areas, through better remuneration for doctors, facilitation of medical services to hard-to-reach areas through e-health and other measures.

C. Focus on preventive healthcare

To achieve the best health outcomes and quality of life, Volt will focus on preventive healthcare. Many diseases are the result of long-term exposure to risk factors, some

⁴⁶ Mobile clinics in Ukraine to bring health services to people in need, WHO Europe, available at <http://www.euro.who.int/en/countries/ukraine/news/news/2014/12/mobile-clinics-in-ukraine-to-bring-health-services-to-people-in-need>

⁴⁷ The Story of Lifeline Express, The better India, available at <https://www.thebetterindia.com/125248/lifeline-express-world-first-hospital-train-indian-railways/>

⁴⁸ WHO, Comprehensive Mental Health Action Plan 2013-2030, available at <https://www.who.int/publications/i/item/9789240031029>

of which can be addressed through better lifestyle choices, cleaner living environments, and a greater focus on preventive healthcare, especially in the early years of life. Volt believes that more resources need to be allocated to preventive healthcare in the following areas:

1. Lifestyle choices and diseases

Across Europe, lifestyle choices contribute significantly to the overall burden of disease.⁴⁹ Unhealthy lifestyle habits such as smoking, physical inactivity and poor diet are some of the main risk factors for disease, which can lead to (chronic) conditions such as cancer, obesity, diabetes, cardiovascular disease and premature death. Although people are living longer, they suffer from diseases more often, which has a negative impact on well-being and further increases healthcare expenditure. Therefore, promoting preventive lifestyles for both physical and mental/social well-being should be a focus in schools, companies, and public awareness campaigns. Regardless of socioeconomic position, all European residents should have access to first-class preventive healthcare throughout their life cycle.⁵⁰

- **Encourage healthy living by sharing best practices and limiting access to harmful and/or addictive substances.** All European schools will provide up-to-date learning tools and practical lessons on lifestyle choices. Additionally, they will also ensure sufficient time and opportunities for physical activity.
- **Further restrict minors' access to tobacco** (i) by imposing an EU-wide ban on the legal purchase of tobacco products by persons under the age of 18; and (ii) by improving enforcement of the purchase restrictions (e.g., through sales licences and fines for vendors and underage buyers).
- **Increase taxation of tobacco products to discourage consumption.** WHO estimates show that more than 8 million deaths are attributed to tobacco each year, 15% of which through being exposed to second-hand smoke. Increasing taxes on tobacco products is a tried and tested method of reducing consumption in spite of risks associated with creating a new informal economy.

⁵¹

⁴⁹ For example, research published in December of 2020 by the WHO Global Health Observatory shows that, in 2019, 7 out of the 10 top death motivations were due to noncommunicable diseases, where the world's biggest killer are ischaemic heart disease and stroke, accounting for almost 9 and over 6 million people respectively, see WHO, Top 10 causes of death, available at <https://www.who.int/news-room/fact-sheets/detail/the-top-10-causes-of-death>; The Lancet, Life, death and disability in 2016, available at [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(17\)32465-0/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(17)32465-0/fulltext)

⁵⁰ This includes having access to affordable healthy nutrition.

⁵¹ WHO, Tobacco, available at <https://www.who.int/news-room/fact-sheets/detail/tobacco>

- **Increase taxes on alcohol** in combination with other policy measures to discourage consumption. This is justified by the negative health consequences of alcohol consumption, including drunken violence.⁵²
- **Set EU guidelines for physical activity** in schools and workplaces.⁵³
- **Explore and test tax reforms for healthier diets**, including:
 - Increasing value added tax (VAT) on unhealthy foods, including saturated fats, trans-fats and processed sugars.
 - Decreasing in VAT on healthy vegetables and fruits.
- **Provide European guidelines for educating children in schools about healthy eating.**
- **Standardise or prescribe vaccines against sexually transmitted infections** such as the human papilloma virus and the Hepatitis B virus in government-sponsored vaccination programmes.
- **Make sexually transmitted infection (STI) testing affordable and accessible to all.**
- **Provide European guidelines for immunisation programmes for the elderly.**
- **Advocate for controlled decriminalisation or legalisation of drugs.** Portugal's progressive legislation and attitude towards drug addiction has shown that the current prevailing model of a “war on drugs” has not and will not work. Volt intends to emulate the Portuguese model and decriminalise all drug possession below a certain threshold. This will free up police resources to prosecute large scale drug smuggling and victimise buyers. It will enable European societies to treat addiction as a medical rather than a criminal problem.⁵⁴

2. Minors should have access to preventive healthcare programs

Early monitoring of health and wellbeing enables effective interventions that have a positive long-term impact. Parents should be supported to make the best choices during pregnancy and for their children in terms of physical and mental healthcare,

⁵² The Lancet, Risk thresholds for alcohol consumption: combined analysis of individual-participant data for 599 912 current drinkers in 83 prospective studies, available at [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(18\)30134-X/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)30134-X/fulltext)

⁵³ People who are insufficiently physically active have a 20% to 30% increased risk of all-cause mortality, where regular physical activity reduces the risk of cardiovascular disease including high blood pressure, diabetes. WHO Global Status Report 2010, available at http://www.who.int/nmh/publications/ncd_report_full_en.pdf

⁵⁴ Cata Institute, Drug Decriminalization Policy in Portugal, available at https://object.cato.org/sites/cato.org/files/pubs/pdf/greenwald_whitepaper.pdf

nutrition, exercise and immunisations. Research has shown the importance of early interventions, and a comprehensive approach to early childhood development to improve children's long-term health.⁵⁵

- **Implement and set EU-wide standards for high-quality preventive healthcare programs for minors.** Health programmes should monitor physical development as well as psychosocial, speech, and socio-emotional development through regular check-ups. Through these programmes, parents should receive the support they need to give their children the best possible start in life. The measures include:
- Providing prenatal care that ensures fair and safe conditions for newborns; regular screening of mothers (e.g. fetal karyotype testing, ultrasound examinations, substance abuse education).
 - Providing EU-wide guidelines on (i) the timing of preventive lifecycle screenings and examinations and (ii) the essential procedures/controls for each screening/examination.
 - Targeted selection of vulnerable minors for additional screenings.
 - Sharing best practices and data between countries to improve national programmes. Although preventive healthcare programmes for minors exist in most European countries, health outcomes and access to health care vary widely across Europe.⁵⁶
 - Standardising obligatory vaccination programmes for minors in accordance with European guidelines.
 - Carrying out the neonatal heel prick to detect genetic diseases among newborns (e.g. hypothyroidism, phenylketonuria, cystic fibrosis).
 - Increasing coverage of preventive healthcare for minors through measures such as infant home visiting and school attendance programmes.
 - Providing prevention programmes against depression and anxiety to adolescents, as research has shown it helps reduce the symptoms of these conditions.⁵⁷

3. Reduce environmental risks

At the start of the century, global climate change, urban air pollution, and lead pollution were responsible for nearly 2.4% of diseases and deaths worldwide.⁵⁸ To negate the negative impact of those causes over time and hand over a clean and safe

⁵⁵ Heckman Equation, There's more to gain by taking a comprehensive approach to early childhood development, available at <https://heckmanequation.org/resource/invest-in-early-childhood-development-reduce-deficits-strenghten-the-economy/>

⁵⁶ NCBI, Preventive youth health care in 11 European countries: an exploratory analysis, available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3359454/>

⁵⁷ NCBI, A Meta-Analytic Review of Depression Prevention Programs for Children and Adolescents, available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2758769/>

⁵⁸ WHO, Global Health Risks: Mortality and burden of disease attributable to selected major risks, available at https://apps.who.int/iris/bitstream/handle/10665/44203/9789241563871_eng.pdf

future to the next generations, Volt wants to:

- **Monitor key environmental quality indicators (e.g., air pollution using SO_x, NO_x, and particulate levels, water quality pH and harmful residual minerals such as limestone) in real-time to (1) inform citizens, (2) guide policy, and (3) detect dangerous situations that can lead to diseases such as thyroid carcinoma and mesothelioma.**
- **Take measures to improve air quality in cities, e.g.,**
 - Limit traffic on days when certain air quality limits are exceeded, as already implemented in Spain, Italy, and Denmark, where measures include (i) prohibiting cars and/or trucks from entering the city or (ii) restricting access to even or odd number of licence plates.
 - Improve public transportation networks.
 - Support the development of shared means of transport (e.g., car sharing).
 - Provide environmentally friendly alternatives for transport, e.g., safe and comprehensive infrastructure for cyclists and pedestrians and bike sharing.
 - Ensure the affordability of public transport for all.
- **Tighten regulation and controls on industry to minimise harmful emissions.**
- **Invest in research on air purification and targeted regeneration of green spaces and implement pilot projects.**

4. Data-driven prevention

Volt believes that better use of data can be a powerful driver of innovation in healthcare, especially when it comes to better tailoring (preventive) healthcare to the individual. Volt aims to:

- **Strengthen government agencies in monitoring risk factors** based on the probability of occurrence of medical risk factors, such as diseases in patients, in different geographic and demographic categories to better target preventive healthcare to vulnerable subgroups.
- **Use anonymised patient data to set up a trustworthy and secure health information system** where a citizen can opt-in to obtain “recommendation packages” for screening based on individual characteristics.⁵⁹ The prompts for

⁵⁹ The Västerbotten Intervention Programme in Sweden demonstrates the value of individualised preventive healthcare for cardiovascular disease. The program consists of physical tests, analysis and one-one-one discussions of the results with a nurse, resulting in changes of lifestyle suggestions that improve the individual's health condition. See BMC Public Health, A cost-effectiveness analysis of a community based CVD program in Sweden based on a retrospective register cohort, available at <https://bmcpublihealth.biomedcentral.com/articles/10.1186/s12889-018-5339-3>

testing will be communicated through e-health platforms (via apps, smart devices, etc.) resulting in the following benefits:

- Improve health outcomes through individualised preventive healthcare.
- Provide forecasts for incoming test volume to healthcare providers.
- Reduce waiting time for patients.
- Track tests by patients to remind them to perform them at the right time.

- **Tax deductibility of health care expenses for citizens.**
- **Monitor changes in the prevalence of chronic diseases to support policy-making in preventive healthcare.**

D. Empowering and educating patients

- **EU-wide provision of urgent but non-life-threatening medical assistance through an on-call service** (telephone number 116117.) Callers would receive medical assistance or an appointment with a specialist over the phone. They could also be advised whether they should go to a nearby primary care or emergency care unit. This would alleviate unnecessary pressure on emergency rooms and first-aid units.
- **Run an EU-wide campaign to inform citizens about the existence and services of the 116117 telephone number.**
- **Raise public awareness of the need for organ donations** to increase the number of donors (e.g. by sending letters for informed-based decision-making to every citizen turning 18 and by creating a transparent system). Explore a gradual transition to a system where organ donation is the default option at the time of death, unless a patient actively chooses to opt-out (not to donate).
- **Prevent discriminatory exclusion of potential blood donors through unbiased Individual Risk Assessments (IRA).** The donation of blood and blood components enables health care providers in the European Union to treat trauma or major surgery; treat chronic blood diseases; and produce medicinal products.⁶⁰ Although we rely on these voluntary blood donations, the exclusion criteria introduced to prevent blood donations with transmissible diseases such as HIV have not been sufficiently updated. As a result, they still categorically hold back a large population, e.g. parts of the LGBTIQ+ and commercial sex workers. Current criteria and lengthy deferral periods are often

⁶⁰ European Commission about Blood, available at https://ec.europa.eu/health/blood_tissues_organs/blood_en

discriminatory and have led to non-compliance.⁶¹ In line with Article 21 of the EU Charter of Fundamental Rights about non-discrimination⁶², Volt calls for blood donation on an IRA that is independent of sex, gender, and sexual orientation, similar to that used in Italy since 2001 without having any measurable impact on the HIV epidemic.⁶³ We want the IRA to consist of a questionnaire followed by a personal interview with a medical professional. Following international safety standards, we demand a deferral period after risky behaviour that does not exceed three months⁶⁴.

- **Harmonisation of information and guidelines on lifestyle choices leads to lifestyle diseases** based on the latest scientific evidence.

E. Ageing populations

1. Healthcare for the elderly

Across Europe, we need to find solutions to challenges posed by shifting demographics⁶⁵ in healthcare. As life expectancy increases, so does the incidence of illness among older people, leading to an increasing need for nursing and medical care in this segment. While many older people find support in assisted living facilities and nursing homes as they age, autonomy and self-determination, which remain important components of a decent quality of life, may still be compromised. Although advances in medical technology have led to spectacular increases in life expectancy, quality of life is often not adequately considered in medical interventions. Volt aims to address this:

- **Improve the quality of life and (long-term) care for older people by expanding access to assisted living programs, such as Buurtzorg in the Netherlands, where self-managed teams flexibly arrange the best care that fits the individual patient, and other similar programs.**⁶⁶

⁶¹ Sturrock BR, Mucklow S., What is the evidence for the change in the blood -donation deferral period for high-risk groups and does it go far enough?. *Clin Med (Lond)*. 2018;18(4):304-307. available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6334046/> -

⁶² Article 21, EU Charter of Fundamental Rights available at <https://fra.europa.eu/en/eu-charter/article/21-non-discrimination>

⁶³ Suligoi B, Pupella S, Regine V, Raimondo M, Velati C, Grazzini G. Changing blood donor screening criteria from permanent deferral for men who have sex with men to individual sexual risk assessment: no evidence of a significant impact on the human immunodeficiency virus epidemic in Italy. *Blood Transfus*. 2013;11(3):441-448. available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3729137/>

⁶⁴ See above: Sturrock BR, Mucklow S. *Clin Med (Lond)*. 2018.

⁶⁵ European Commission, Population structure and ageing, available at http://ec.europa.eu/eurostat/statistics-explained/index.php/Population_structure_and_ageing

⁶⁶ The Guardian, Buurtzorg: the Dutch model of neighbourhood care that is going global, available at <https://www.theguardian.com/social-care-network/2017/may/09/buurtzorg-dutch-model-neighbourhood-care>; For further suggestions on how to improve long-term care for older people also see Interlinks,

- **Education and training of medical students, specialists, and other health professionals to facilitate decision-making processes about possible treatments with patient participation**, with the intention of improving or maintaining quality of life. This is particularly relevant for patients with complex co-morbidities and at the end of life.
- **Ensure the provision of palliative care** in the home environment at the end of life.

2. Supporting fertility and childcare

A steady trend of declining fertility can be observed across Europe. Over the period from 1961–2015, the highest annual number of live births in the EU-28 was recorded in 1964, at 7.8 million. Since then, the number of live births in the EU-28 has declined, reaching a low of 5.0 million in 2002.⁶⁷

- **Ensure that parents have access to affordable childcare** so that an individual work-life balance can be achieved.
- **Guarantee a high, Europe-wide standard for equally-paid parental, paternity, and maternity leave.** Either one parent or both take parental leave after maternity and paternity leave. The length of leave can be decided according to the countries' existing frameworks, while ensuring gender equality⁶⁸, but should be a minimum of 26 weeks and may be taken either consecutively (which the employer cannot refuse) or at irregular intervals (which the employer can refuse). Additional time off should be shared according to the parents' preferences, providing substantive incentives for both parents to take parental leave.⁶⁹ Similar to maternity and paternity allowance, parental allowance is equivalent to earned income.⁷⁰

F. Innovation and research

- **Invest in e-health** programmes to promote healthcare coverage, flexibility and efficiency of healthcare provision, and research focused on advanced medical data analytics. Volt wants to:

available at <http://interlinks.euro.centre.org/project>. These programmes are also meant to improve the situation of formal and informal caregivers, while taking into account gendered aspects of care.

⁶⁷ Eurostat, Fertility Statistics, available at

http://ec.europa.eu/eurostat/statistics-explained/index.php/Fertility_statistics

⁶⁸ For more details see [End discrimination against groups and minorities, End discrimination against women, In the workplace](#)

⁶⁹ This also applies to same-sex couples. Single parents can either choose to take the full time off (otherwise available to both parents) or to be awarded financial benefits.

⁷⁰ For more details, see Social Equality, Protect the human and civil rights of groups and minorities, Protect the human and civil rights of women, In the workplace

- Implement e-booking systems to avoid costly waiting lists.⁷¹
- Improve telemedical networks to improve access to (i) healthcare in remote areas and (ii) consultations with specialists. The latter should be provided, especially for patients with complex conditions and a high degree of comorbidity that may complicate travel or lead to a sudden need for a specialist.
- Use e-health to connect a patient's prescriptions to the European Health Insurance Card (EHIC). Prescriptions loaded on the EHIC should allow people to obtain prescription medicines from any pharmacy in the EU, improving access to medicines.
- Provide opt-in options to load (i) patient diagnoses and/or medical records, (ii) organ-donation preferences, and (iii) living wills into the EHIC to improve healthcare tailored to the individual.
- Invest in standardised secure digital patient records (1) for data collection to increase the efficiency of healthcare and (2) to enable innovative big-data research based on anonymised General Data Protection Regulation (GDPR)-compliant patient records.
- Increase funding for modernisation and digitisation to facilitate medical workflows in hospitals and medical institutions.

➤ **Invest in medical research by:**

- Increase funding for national and transnational publicly owned research organisations and found a new publicly owned European research centre with an explicit focus on biomedical research, loosely modelled on the National Institute of Health (USA).⁷² This research centre will enable cutting-edge research to be carried out on a scale that is not necessarily supported by national laboratories or cannot be risked by private companies. Thus, the research centre is designed to empower Europe as a daring and pioneering region in the field of medical research, thereby strengthening the competitiveness of European life sciences companies by promoting innovation.
- Promote evidence-based medicine by investing in the development and implementation of standardised European guidelines⁷³ for the treatment and diagnostics of diseases in order to harmonise the quality of healthcare across Europe.

⁷¹ In 2014 Macedonia managed to almost eliminate its waiting lists by implementing a real-time e-booking system as described in the Euro Health Consumer Index 2017. See WHO Europe, Integrated health information system, available at <http://www.euro.who.int/en/countries/the-former-yugoslav-republic-of-macedonia/news/news/2015/05/towards-an-integrated-health-information-system-in-the-former-yugoslav-republic-of-macedonia>

⁷² National Institutes of Health, home, available at <https://www.nih.gov/>

⁷³ For example: C. O'Mahony et al., Effectiveness of the 2014 European Society of Cardiology guideline on sudden cardiac death in hypertrophic cardiomyopathy: a systematic review and meta-analysis, available at <https://heart.bmj.com/content/early/2018/10/26/heartjnl-2018-313700>
 Pulverino et al., European Respiratory Society guidelines for the management of adult bronchiectasis, available at <http://erj.ersjournals.com/content/50/3/1700629>. See also [Alignment of European healthcare systems](#)

- Incentivise research in areas of public interest with low economic potential, such as new antibiotics,⁷⁴ treatments for rare diseases,⁷⁵ and vaccines.⁷⁶
 - Invest in individualised medicine using high-throughput techniques (DNA sequencing, micro-arrays, mass spectrometry, etc.) to investigate ways of improving both preventive and curative healthcare by using individual genetic, physiological, and biochemical characteristics while integrating behavioural aspects such as physical activity and nutrition. Key issues for the successful implementation of these techniques include: (i) reducing the cost and increasing the quality of measurement technologies; (ii) developing the necessary bioinformatics, computational and statistical methods to integrate the volumes of data masses generated by these measurement techniques;⁷⁷ (iii) providing funding for long-term academic research projects and/or agendas relevant to high-throughput techniques and medical applications; and (iv) ensuring the ethical handling of the data and procedures,⁷⁸ including absolute privacy and security of patient data.
 - Incentivise the publication of null-results while improving the transparency of research projects and their statistical analyses⁷⁹ through standardised reporting criteria,⁸⁰ pre-defined analyses plans, and, where compatible with data protection rules, the publication of the raw data.⁸¹
- **Create regulations for more sustainable packaging** of medicine using renewable resources and less plastic.

G. Healthcare professionals

1. Nurses

- **Promote home care networks** that link a patient's existing community to a local team of nursing professionals who then work with that community to

⁷⁴ C. Källberg et al., Introduction and geographic availability of new antibiotics approved between 1999 and 2014, available at <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0205166>

⁷⁵ L. Luzzatto et al., Rare diseases and effective treatments: are we delivering?, pg 750–752, available at <https://www.sciencedirect.com/science/article/pii/S0140673615602975>

⁷⁶ C. Sheridan, Vaccine market boosters, pg 499–501, available at <https://www.nature.com/articles/nbt0609-499>

⁷⁷ S. Huang, K. Chaudhary, L. X. Garmire, More Is Better: Recent Progress in Multi-Omics Data Integration Methods, available at <https://www.frontiersin.org/articles/10.3389/fgene.2017.00084/full>

⁷⁸ M. Langanke et al., Comparing different scientific approaches to personalized medicine: research ethics and privacy protection, pg 437–444, available at <https://www.futuremedicine.com/doi/10.2217/pme.11.34>

⁷⁹ J. P A. Ioannidis, Why Most Published Research Findings Are False, available at <https://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.0020124>

⁸⁰ For example: European Commission, European guidelines on clinical trials, available at https://ec.europa.eu/health/human-use/clinical-trials_en

⁸¹ See for example: Nature Journal, Scientific Data, available at <https://www.nature.com/sdata/>

tailor support to the patient's needs, following the example of Buurtzorg Netherlands.⁸²

- **Strengthen the independence and attractiveness of the nursing profession as a more independent and attractive field** by promoting small, self-managed teams.
- **Introduction of nursing assistants** to help patients in their daily hospital life, in addition to nurses attending to prescribed medical needs, as is the case in the United States, the United Kingdom, and Denmark.
- **Encourage the unionisation of nurses and nursing assistants** so that their voices can be heard.

2. Doctors/general

- **Harmonise accreditation schemes across Europe** and review entry requirements for studies (e.g. reward social engagement skills and introduce special exams as in Austria⁸³ to prevent high drop-out rates and gain the necessary qualifications).
- **Incentivise and encourage participation in European exchange programmes** during studies and work for all healthcare professionals.
- **Allow for flexible working hours**, part-time jobs and a family-friendly working environment.

3. Midwives

- **Review insurance costs for midwives.**
- **Support self-organised projects** designed to efficiently connect pregnant women to midwives, both pre-and postnatally (e.g. through apps with online chats during pregnancy and in the first months after birth).

H. Healthcare expenditures and efficiency

Over the past few decades, most countries have experienced a steady increase in healthcare expenditures. By 2020, the EU average has grown to 8% of Member States' GDP, with spending ranges between 4.8% of GDP in Latvia and 9.2% of GDP in Czechia

⁸² For best practice for neighbourhood care see Buurtzorg Nederland, Humany over bureaucracy, available at <https://www.buurtzorg.com/>

⁸³ Medical University of Vienna, Medicine and Dentistry Admission Test, available at <https://www.meduniwien.ac.at/web/en/studies-further-education/application-admission/medicine-and-dentistry-degree/admissions-test/>

and Austria..⁸⁴ After the economic crisis, direct out-of-pocket spending on healthcare has increased faster than public spending on healthcare. This trend is making healthcare more expensive for consumers and could pose a serious long-term threat in terms of affordability for all European citizens. Volt believes governments should keep healthcare affordable and therefore both avoid cuts to overall healthcare spending and increase funding to programmes that aim to reduce the overall cost of healthcare in general, such as preventive medicine initiatives. Volt also promotes the efficient use of resources and best-cost-benefit policies. To this end, Volt aims to:

- **Reduce costs by establishing a legal and regulatory framework that allows healthcare professionals** to flexibly provide the best care for individual patients **in small self-governing teams**, e.g., the Buurtzorg model in the Netherlands.⁸⁵
- **Ensure the efficient and safe use and supply of medicines by:**
 - Providing medicine in individualised packages and quantities according to patients' needs instead of standard packages that often result in large quantities of unused medicine and waste.
 - Coordinating negotiations with the pharmaceutical industry at European level to reduce costs.
 - Reducing waste of drugs by better allocating nearly expired medicines to regions where they are currently needed through a Europe-wide marketplace.
- **Create incentives for physicians and health professionals to provide more preventive healthcare** services to avoid “downstream costs”. Incentive schemes need to be set individually for each country to suit the respective health (financing) system.

I. Sexual and reproductive health and rights

- **Make abortion accessible and affordable for all women⁸⁶ and ensure that women have access to contraception.**⁸⁷ Approach sexual and reproductive health and rights holistically as a key issue of gender equality and health.
- **Ensure that schools introduce accurate obligatory teaching on reproductive health and rights** so that there is a European standard for curricula that schools comply with.

⁸⁴ Eurostatm Government expenditure on health, available at <https://ec.europa.eu/eurostat/statistics-explained/SEPDF/cache/42733.pdf>

⁸⁵ The Guardian, Buurtzorg: the Dutch model of neighbourhood care that is going global, available at <https://www.theguardian.com/social-care-network/2017/may/09/buurtzorg-dutch-model-neighbourhood-care>; Ernst & Young documented estimated savings of around 50% to healthcare services provided by Buurtzorg due to the implementation of community care programs that significantly reduced the required hours of care. See Buurtzorg, About Us, available at <https://www.buurtzorg.com/about-us/>

⁸⁶ For more details see Social Equality, Own your body, Reproductive rights

⁸⁷ For more details see Social Equality, Own your body, Reproductive rights

J. Options and rights in pregnancy and birth

Despite the recommendations of the World Health Organisation (WHO)⁸⁸, an alarming rate of unnecessary medical interventions^{89 90 91} are performed on low-risk births. In most cases, these interventions prove dehumanising for the women involved, who perceive a “baby-factory” environment that reflects a society focused on productivity rather than respect.

Maternity is one of the most important and impactful moments in a person's life. The *Humanization of Birth* is a concept that focuses on the mother's needs and away from (but not excluding) midwives and other medical professionals. All efforts should be directed towards providing mothers with the scientific and legal information they need to make the best possible choices when giving birth to their child. The rights of partners and close family members should also be highly considered.

- **Ensure that the World Health Organisation (WHO) recommendations on humanising childbirth are followed.**
 - Ensure that medical consultation, treatment, and childbirth respect human rights and dignity.
 - Call on the ministries responsible for health and gender equality to collect data on medical interventions during childbirth and on cases of gynaecological and obstetrical violence, and to conduct and publish studies on this topic.
 - Disseminate the best practices promoted by WHO and invite national medical associations to discuss this issue and make recommendations on the prevention of gynaecological and obstetrical violence, in particular through a commission to promote a caring approach in gynaecology.
 - Conduct information and awareness-raising campaigns on patients' rights and on preventing and combating sexism and violence against women, including gynaecological and obstetric violence.
 - Adopt and implement legislation on patients' informed consent and their right to information at the different stages of medical procedures, where this has not already been done.

⁸⁸ WHO recommendations Intrapartum care for a positive childbirth experience, available at: <https://apps.who.int/iris/bitstream/handle/10665/272447/WHO-RHR-18.12-eng.pdf>

⁸⁹ Health at a Glance 2019, OECD Indicators, available at: <https://www.oecd.org/health/health-systems/health-at-a-glance-19991312.htm>

⁹⁰ WHO statement on caesarean section rates, available at: https://apps.who.int/iris/bitstream/handle/10665/161442/WHO_RHR_15.02_eng.pdf

⁹¹ WHO recommendations for induction of labour, available at: http://apps.who.int/iris/bitstream/handle/10665/44531/9789241501156_eng.pdf

- o Ensure adequate funding for healthcare facilities to provide decent working conditions for nurses, respectful and caring treatment of patients and women in labour, and access to pain relief.
- o Provide specific training for obstetricians and gynaecologists and raise awareness of gynaecological and obstetric violence as part of this training.
- o Ensure that the training of doctors, midwives, and nurses pays particular attention to the relationship between care providers and patients; the concept of informed consent; gender equality; the inclusion of LGBTIQ+ people, persons with disabilities, and vulnerable people; communication; the prevention of sexism and violence; and the promotion of a humane care approach.
- o Propose specific and accessible reporting and complaint mechanisms for victims of gynaecological and obstetrical violence inside and outside hospitals, including with ombudsperson services.
- o Provide for a mechanism to investigate complaints about gynaecological and obstetrical violence to the exclusion of any mediation and, if this is not already the case, provide for sanctions against healthcare professionals if a complaint about this type of violence is proven.
- o Offer a support service for victims of gynaecological and obstetrical violence and ensure that they receive care.
- o Signature, ratification, and implementation of the Istanbul Convention by those states that have not yet done so.⁹²
- o Allow a second companion, appointed by the couple, to assist during childbirth.
- o If there are no medical reasons not to do so, structures should be put in place to enable the accompanying person to be present and to provide her with emotional support during the pregnancy hospitalisation.
- o Increase the availability of water births in public health systems⁹³.
- o Make birth plans mandatory in which the pregnant woman and medical professionals discuss and determine the further procedures during childbirth.
- o Allow the mother to choose the health professionals to support her during pregnancy, labour, childbirth, and the postpartum period.
- o Assure that women's rights are respected, even during pregnancy, labour, childbirth and postpartum period.
- o Incentivise the implementation of birth centres or birth houses in the public health system.

⁹² Obstetrical and gynaecological violence, available at:

<http://assembly.coe.int/nw/xml/XRef/Xref-XML2HTML-en.asp?fileid=28236&lang=en>

⁹³ Immersion in Water During Labour and Birth (RCOG/Royal College of Midwives Joint Statement No. 1), Published on Royal College of Obstetricians and Gynaecologists, available at:

<http://www.rcog.org.uk>

V. Ensure a fair legal system, effective law enforcement, and anti-corruption legislation

Volt wants 'smart' European States to ensure **frictionless** access to **human, fair, transparent, accountable,** and **efficient** legal systems and law enforcement agencies.

Volt also has a **zero-tolerance policy** towards **corruption. State capture**, when private interests dictate state policy; **white collar crime**; and corporate **tax avoidance**. These actions are incompatible with European values and result in significant waste of public and private resources.

To achieve this goal, it is necessary, but non-exhaustive, to do the following: (1) reform and strengthen the judicial system; (2) combat white-collar (corporate and financial) crime; and (3) regulate, protect, and incentivise whistleblowing. In addition, law enforcement needs to be improved and limited to regulating state-of-emergency extensions and ending police violence (prosecution and police operations), and sanctions outside the penal system must be prioritised.

If not addressed, corruption can become systemic, and in Europe it is most often associated with illiberal models of state capture. Globally, corruption has become increasingly critical as an endemic part of the global economy. Studies have found that there is anywhere between 21-32 trillion euros of unpaid taxes⁹⁴ hidden in tax havens around the world. Ending corruption and tax avoidance is absolutely critical. With growing inequalities leading to political instability and an urgent need to tackle other pressing global issues.

A. Intelligent judicial systems

- **Reduce backlog of pending cases** by applying simple standards (e.g., focusing on first-in-first-out and urgent cases).
- **Develop alternative routes to litigation**, e.g., mediation and negotiation, in areas such as family law.
- **Encourage the digitisation of proceedings** for civil lawsuits below a certain amount in dispute and use digital means to help defendants keep up with their court dates, etc.
- **Expand legal aid services in all Member States to provide effective access to justice**, particularly to the most vulnerable and marginalised populations.

⁹⁴ Tax Justice Network, Tax avoidance and evasion - The scale of the problem, available at <https://www.taxjustice.net/wp-content/uploads/2017/11/Tax-dodging-the-scale-of-the-problem-TJN-Briefing.pdf>

B. Fighting corruption

- **Confer additional powers to the European anti-corruption office OLAF and the European Ombudsman, as well as the new European Public Prosecutor's Office.** The European institutions will be held accountable by the European Commission Anti-Fraud Office (OLAF), and the Member States will be controlled by their respective anti-corruption institutions. Corruption needs to be controlled by an external actor to the government in question. Therefore, OLAF and the newly created European Public Prosecutor's Office (EPPO) should be given additional powers to investigate cases of corruption in Member States, including the ability to access documents and conduct interviews in cooperation with the European Prosecutor in charge of the fight against corruption. Membership in the EPPO, which can only be established in the context of enhanced cooperation, should be mandatory in order to receive EU funding over and beyond the budget. OLAF should also have the right to bring cases to a national court if necessary.
- **Expand the European Transparency Register⁹⁵** to all EU institutions, including the Commission and the Council, and make it mandatory for all lobbying and advocacy organisations to be listed therein. Apply the same register system at all levels of government in the Member States.
- **Effectively tackle the phenomenon of “revolving doors”** between governments and EU institutions, in line with Transparency International's recommendations.⁹⁶ Measures include substantial “cooling off” periods for civil servants and elected officials leaving their positions and taking on a role involving profit-oriented advocacy or lobbying for their former institutions. Institutional ethics committees must be established or reinforced and given credible, legally binding powers to prevent conflicts of interest after leaving public service, under stricter ethics guidelines. The recent Barroso & Goldman Sachs scandal must not be repeated.
- **Ensure that opportunities for abuse of power by state actors are limited by requiring the transparency of public expenditure.** We will promote the implementation of e-governance and e-procurement initiatives to stop bureaucratic corruption. These changes must be made to accelerate the digitisation of state institutions and to make transparent both the decisions taken by state institutions and interactions with companies they contract with. Any decision requiring public expenditure must be made fully accessible to the press and the constituents of the respective Member State. To accommodate this, Volt proposes to:

⁹⁵ European Commission, Transparency Register, available at <http://ec.europa.eu/transparencyregister/public/homePage.do>

⁹⁶ TI report, Access All Areas, available at <http://transparency.eu/wp-content/uploads/2017/01/Access-all-areas.pdf>

- Use digital infrastructure to streamline and promote transparency of decisions made by state institutions and their contractors to ensure accountability.
 - Oblige Member States to advance the digitisation of their administration. In the case of non-compliance, EU funding will be cut to incentivise this commitment.
 - Allocate EU funds to support the development of infrastructure for such initiatives and to retrain civil servants to work with e-Government tools.
- **Lead by example on the transparency of party financing.** Political parties, as well as individuals in government, receive illicit funding. Therefore, Volt will publish online the identity of all relevant donors and the amount donated. We will also introduce a code of conduct that regulates what kinds of donations Volt is allowed to accept.
 - **Introduce requirements for full disclosure of the office costs and expenses by elected officials** in carrying out their work, including members of national and European Parliaments, modelled on the procedures already followed by certain groups of MEPs.
 - **Expand the implementation of Integrity Pacts** and clean contracts in public procurement and public-private partnership together with civil society, in line with best practices recommended by Transparency International.⁹⁷

C. Ending tax avoidance and evasion and increasing tax collection efficiency

- **Support the urgent implementation of the OECD/G20 Base Erosion Profit Shifting Actions (BEPS) project** to ensure that profits are taxed in the region where the economic activities generating the profits are performed and where value creation takes place.⁹⁸
- **Push for the full adoption and implementation of the Common Consolidated Corporate Tax Base (CCCTB) proposal** endorsed by the European Parliament in March 2018.⁹⁹ Multinational online companies must be taxed for their “digital presence” and value generated in a country.

⁹⁷For more information see EU Reform chapter, security. Transparency International, Integrity Pacts, available at https://www.transparency.org/whatwedo/tools/integrity_pacts/3

⁹⁸ OECD, BEPS Actions, available at www.oecd.org/ctp/beeps-actions.htm

⁹⁹ European Parliament, MEPs approve tax plan, available at <http://www.europarl.europa.eu/news/en/press-room/20180309IPR99422/meps-approve-new-eu-corporate-tax-plan-which-embraces-digital-presence>; European Parliament Research Service briefing, available at [http://www.europarl.europa.eu/ReqData/etudes/BRIE/2017/599395/EPRS_BRI\(2017\)599395_EN.pdf](http://www.europarl.europa.eu/ReqData/etudes/BRIE/2017/599395/EPRS_BRI(2017)599395_EN.pdf)

- **Establish an EU tax authority to combat cross-border tax avoidance and evasion.**
 - Ban “letterbox”¹⁰⁰ companies that allow multinationals to create empty registrations in countries for tax purposes and ban “sweetheart” discriminatory tax deals between governments and multinationals.
 - Shed light on and create transparency in company ownership structures by requiring the disclosure of personal data of the owners and beneficiaries of companies in the public register.
- **Push for administrative reforms across Europe at all levels of government to improve the efficiency and effectiveness of tax collection** and abolish tax havens and tax loopholes in the EU.

D. Corporate social responsibility and accountability

Thoroughly prosecute political, economic, and financial crimes and support initiatives to expand corporate social responsibility, ensure compliance, and ethical standards. Strengthen whistle-blowing protection and extend due diligence to the entire value chain.

- **Reinforce the newly created European Public Prosecutor's Office** and encourage the development of **public prosecutors specialising in economic and financial crime** in countries where they do not yet exist.
- **Support the protection, anonymity, and remuneration for whistleblowers** who disclose information for the benefit of the public.
- **Advocate for international standards on corporate responsibility**, including the UN Compact and the new Binding Treaty on Business and Human Rights.
- **Put in place legislation that extends responsible practices** and due diligence throughout the supply chains.

E. Law enforcement and police operations

- **Strengthen European police cooperation**, define state of emergency limits, and ensure that police forces operate in a fair and effective manner while reducing violence and eliminating discriminatory practices.
- **Limit the duration of the state of emergency**; ensure full and transparent monitoring of human rights during the emergency period; and establish stricter review mechanisms to ensure that such measures are truly necessary.

¹⁰⁰ ETUC, Letterbox-type practices, available at <https://www.etuc.org/press/letterbox-type-practices-avoiding-taxes-and-exploiting-workers-across-eu>

- **Promote the work of Europol and Eurojust**, accelerate and support integration, and ensure respect for human rights.¹⁰¹
- **End ethnic profiling** during police identity checks and require officers to issue a stop form for every identity check.¹⁰²
- **Limit the discretion of officers** by requiring reasonable and specific suspicion for all checks and searches.¹⁰³
- **End police violence** through training, accountability mechanisms and monitoring.¹⁰⁴
- **Limit the use of military-st police actions** to street protests and local conflicts.
- **Expand training of police forces in dealing with hate crimes.**¹⁰⁵

F. Prison reform

- **Ensure that prison conditions always comply with human rights and dignity regulations** in accordance with Council of Europe standards and that administrative powers are not used in a discriminatory manner. Also, ensure that prisons are as close as possible to the outside world to facilitate reintegration and inclusion.
- **Encourage research into alternatives to prisons that both ensure the safety of society** and enable the successful reintegration of individuals into it through the promotion of courses and activities, as well as reintegration into society.
- **Prioritise alternative sanctions (other than prison, e.g., community service) for certain non-violent crimes.**

¹⁰¹ For more details see Other provisions for good governance, Military & non-military capabilities and Common security culture

¹⁰² For more details see Social Equality, Protect the human and civil rights of groups and minorities, Protect the human and civil rights with regards to ethnicity, national origin, descent and skin colour, In the law

¹⁰³ For more details see Social Equality, Protect the human and civil rights of groups and minorities, Protect the human and civil rights with regards to ethnicity, national origin, descent and skin colour, In the law

¹⁰⁴ For more details see Social Equality, Protect the human and civil rights of groups and minorities, Protect the human and civil rights with regards to ethnicity, national origin, descent and skin colour, In the law

¹⁰⁵ See, for example, Council of Europe, Policing Hate Crime against LGBTI persons: Training for a Professional Police Response, available at <https://rm.coe.int/prems-030717-qbr-2575-hate-crimes-against-lgbti-web-a4/1680723b1d>

- **Offer psychological treatment and/or psychotherapy to prisoners,** especially those suffering from attention deficit hyperactivity disorder (ADHD) in combination with substance abuse,¹⁰⁶ including alternative treatments like meditation and mindfulness.
- **Ensure that juveniles are not detained with adults.**
- **Develop an education system that serves both short- and long-term offenders.** The curriculum should be varied, with particular emphasis on supplementing.
- **Ensure that prisoners undergoing strip searches are searched by same-sex officers.** For certain inmates subject to strict religious or cultural obligations, all necessary precautions and measures must be taken not to cross sensitive boundaries. Officers must be aware of these requests in advance.
- **Provide cultural training for prison officers.** All staff should be trained to learn the techniques needed to work with multi-ethnic prison communities. A basic program should be implemented across the board. A more intensive cultural education program could greatly improve inmate-officer relations.

¹⁰⁶ Overall, 51.4% of male young adult offenders and 43.6% of female offenders had a child psychiatric history. The population-attributable risk of criminality from childhood disorders was 20.6% for young adult female participants and 15.3% for male participants. See NCBI, Childhood psychiatric disorders and young adult crime, available at <https://www.ncbi.nlm.nih.gov/pubmed/17974931>

VI. Guarantee digital rights and freedom

In a society that is shaped by technology and connectivity, our online rights are essential to our democracy. Volt will work to guarantee citizens' rights on the internet and to enhance digital literacy and technological competence. Our freedom of expression and our economic, social, and cultural rights depend on our ability to engage with technology. Volt will create a new type of policy and provide a forum to debate our common future with new technologies.

A. Internet access

- **Push the European Union and European countries to invest more to ensure high-quality internet connectivity across Europe.**¹⁰⁷ This includes the fastest available mobile network connections and WiFi in urban and rural areas, the most marginalised communities on the internet. The economic benefits of widespread connectivity should be encouraged, while ensuring that provision is equitable, fair, and universal as a merit good or public good.

B. Digital education

- **Foster the accessibility to teaching of digital technological skills for all ages whilst focusing on Science, Technology, Engineering, Arts, and Mathematics (STEAM).** Online education must begin at an early age and progress toward life-long learning and vocational training, including an emphasis on mental health and social well-being given the impact of the digital environment.
- **Promote investment in lifelong adult education programmes with a focus on occupational training.** As more and more jobs become redundant due to automation, more and more people will need to be retrained to work in new roles or to use new technologies. Digital literacy will therefore become increasingly important and require greater investment. Occupational competence, or the idea that people should be able to develop their own interests when they have access to information and technology, should be part of a person's development throughout their life.

C. Digital single market

¹⁰⁷ European Commission, Connectivity for a European Gigabit Society, available at <https://digital-strategy.ec.europa.eu/en/library/connectivity-european-gigabit-society-brochure>

- **Prioritise developing the digital single market** so that companies and start-ups can take advantage of the 500 million consumers and the economies of scale that come with it, while also working with the EU and other European countries. New online forms of organisations must be taken into account, as well as the potential of alternative business models such as cooperatives and mutual societies.

D. Digital rights

- **Push for a Digital Bill of Rights as a binding international legal instrument based on existing internet governance norms.**¹⁰⁸ To the extent that connectivity enables citizens to participate in society, this instrument would guarantee individual and social rights in a connected world, including the right to access the internet, and it would also protect related rights in the digital environment, such as privacy, data protection, freedom of expression, information and association online, and stakeholder-based internet governance. The principles of Net Neutrality and an open internet are at the core of an internet system that guarantees these rights. Volt will advocate for the EU to include digital rights and freedoms in its agreements with third countries.
- **Support and expand privacy and data protection, building on the General Data Protection Regulation (GDPR).**¹⁰⁹ Encryption is key to ensuring online privacy. Volt will work to promote encryption of online communications. While effective protection against terrorist and criminal threats is critical, citizens must never accept mass surveillance as the norm, whether carried out by state or non-state actors.
- **Advance and protect cybersecurity and digital rights** as new revolutionary technologies emerge in the coming era of the Internet of Things (IoT),¹¹⁰ where smart grids, smart roads, smart hospitals, and even smart furniture will determine crucial aspects of our lives.
- **Ensure that the principle of an open internet and freedom of expression, access, and information are compatible with the rights of authors and creators.** We need to strike a balance between fair rewards and incentives for individual creators and sustainable creative industries with widespread access for consumers. Writers, composers, and other creators must be fairly

¹⁰⁸ IGF, The Charter of Human Rights and Principles for the Internet, available at <http://www.ohchr.org/Documents/Issues/Opinion/Communications/InternetPrinciplesAndRightsCoalition.pdf>

¹⁰⁹ European Commission, EU Data Protection Rules, available at https://ec.europa.eu/info/law/law-topic/data-protection/eu-data-protection-rules_en

¹¹⁰ The Guardian, Rise of the Machines, available at <https://www.theguardian.com/technology/2017/jun/06/internet-of-things-smart-home-smart-city>

compensated for their work, without overly limiting users' access to and freedom of information on the internet.

E. Security and Safety

- **Ensure the security of the internet** by fighting organised crime and security threats, and guaranteeing global resilience against cyber attacks by non-state and state actors. This must be done through greater security cooperation between law enforcement authorities and online platforms, companies, and EU bodies such as EUROPOL and EUIPO.¹¹¹ Further measures must also be taken to combat online intimidation and harassment and their social implications, working together with online platforms and civil society groups.
- **Combat cyber-attacks, disinformation campaigns, and media sabotage.**
- **Work with global technology and social media companies** (e.g. Facebook, Twitter and YouTube) to fight extremism in all its forms.
- **Hold social media companies accountable for spreading misinformation** like any other media platform.
- **Ensure that EU citizens' data stored internationally is handled strictly in accordance with European standards** and is fully protected.
- **Pool European efforts and resources for cyber defence.** Shift some resources from traditional military expenditure - such as personnel - to research and development (R&D) to develop European security know-how.¹¹²
- **Modernise the EU's strategic communication campaigns** to reflect the changing technological environment in the information age in order to effectively compete and defeat violent extremist propaganda campaigns.

F. Ethical approach

- **Commit to an ethical, inclusive, rights-based approach to technological development.** Technological progress should be based on the principle of fairness, whereby the benefits of an innovation should be measured by the extent to which it benefits the most vulnerable which is an important social criterion.

¹¹¹ European Observatory on Infringements of Intellectual Property Rights, available at <https://euipo.europa.eu/ohimportal/en/web/observatory/about-us>

¹¹² For more details see [EU Reform, External security and defence policy reform, Military & non-military capabilities](#)

- **Building a new political culture and vocabulary capable of debating and addressing new issues as they arise.** As technological progress accelerates, we will soon be confronted with issues that today we still consider far-fetched and unimaginable as technologies like artificial intelligence (AI) and the Internet of Things (IoT) develop.

VII. Open-Source Solutions

A. Open-Source Software (FLOSS)

In the age of digital innovation, we must protect the safety and resiliency of the EU's digital infrastructure by allowing an ecosystem of FLOSS (free/libre and open source software, a form of software that allows users the freedom to use, adapt, and redistribute the source code of software applications without having to pay a licence fee) providers that drive innovation in a market that favours monopolies because revenues are not diminishing. To this end, we should encourage the replacement of proprietary software with open source solutions in public administration to create a transparent structure that reduces the risk of data breaches, unauthorised data use, and dependence on proprietary providers. To facilitate this, Volt will:

- **Actively push for the introduction of a directive mandating EU services and institutions to migrate to FLOSS software.**
 - Create a platform for FLOSS software for public administration and mandate public officials to assess available solutions on the platform in terms of scope and cost, following the examples of implementation in Brazil¹¹³ ¹¹⁴, Canada¹¹⁵, and Italy¹¹⁶, before opting for proprietary software.
 - Create a level playing field between research initiatives, communities, NGOs, and private companies publishing FLOSS solutions by investing in visibility and budgetary assistance.
 - Designate publishers as service providers in FLOSS-based public tenders.
 - Recommend adoption at a national level and raise awareness of the advantages of FLOSS software compared to proprietary solutions.
 - Assess the preferred systems from a security perspective, develop community-based EU security initiatives,¹¹⁷ and evaluate their user-friendliness and accessibility.
 - Maintain a catalogue of implementations (use cases) showing how the solutions are used in which context to quickly assess the available systems, their data analysis capabilities, their accessibility, and their requirements.

¹¹³ Ministério do planejamento, Software Público Brasileiro, available at <https://softwarepublico.gov.br/>

¹¹⁴ Andy Oram, Open Source in Brazil, available at <https://www.oreilly.com/ideas/open-source-in-brazil>

¹¹⁵ Government of Canada, Directive on Management of Information Technology, available at <https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=15249>

¹¹⁶ Adarsh Verma, Italian military adopts Open Source LibreOffice and saves 29 million, available at <http://fossbytes.com/italian-military-adopts-open-source-libreoffice-and-saves-29-million/>

¹¹⁷ Joinup, EU-Free and Open Source Software Auditing Community, available at <https://joinup.ec.europa.eu/collection/eu-fossa-2>

- **Push for a bottom-up approach and empower public sector employees** through basic software development training to move from use to understanding.
 - Start the transition from being able to use a solution to understanding how it actually works, creating the capacity to request enhancements for specific and evolving administrative needs.
 - Develop uniform and standardised requirements specifications and centrally controlled change management to establish common use patterns across all disciplines and a more homogeneous software ecosystem.

- **Define standards for administrative software solutions that** allow interoperability of different systems across departments and borders.
 - Promote the adoption of existing FLOSS platforms in the EU institutions and facilitate the standardisation of software development according to the ISA directives¹¹⁸, with a particular focus on adapting the European Interoperability Reference Architecture (EIRA)¹¹⁹ for technically, bureaucratically, and legally interoperable development.
 - Follow best practices¹²⁰ and move FLOSS projects for public administration software to publicly accessible platforms for code publication. Examples of such platforms include Gitlab and Github, but ideally this would be done on a new European platform that explicitly aims to foster collaboration between public administration developers, contributors, and users, and takes more of a collaborative approach to development¹²¹.
 - Emphasise on reliable and consistent data governance, including the management of data definitions in all EU languages.

¹¹⁸ European Commission, About ISA², available at https://ec.europa.eu/isa2/isa2_en

¹¹⁹ EIRA, About European Interoperability Reference Architecture, available at <https://joinup.ec.europa.eu/collection/european-interoperability-reference-architecture-eira/about>

¹²⁰ GitHub, National Security Agency, available at <https://github.com/NationalSecurityAgency>

¹²¹ Joshua Tauberer, How I changed the law with a GitHub pull request, available at <https://arstechnica.com/tech-policy/2018/11/how-i-changed-the-law-with-a-github-pull-request/>

VIII. Support Research

Research is the foundation of our current living standards, our economic prosperity, and our political independence. Technical and scientific progress are necessary to guarantee our future prosperity and meet the environmental and social challenges of tomorrow. Volt's science policy aims to create an even more innovative and competitive European research landscape while respecting the EU's fundamental values, e.g. freedom and sustainability.

The EU's previous scientific programme (Horizon 2020) aimed to spend 3% of EU-wide GDP on research by 2020. However, given past and current dynamics, this threshold was not met as R&D expenditure by 2020 was 2.3%.¹²² The huge disparities in national research spending across Europe are particularly striking.¹²³ The new programme, Horizon Europe, now seeks to increase EU-wide GDP expenditure on research and development to 3% by 2030, instead¹²⁴.

In contrast, emerging countries such as India and China show impressive scientific development in international comparison. This is reflected not only in the increasing numbers of scientific publications but also in the fact that China, for example, reportedly lists more patent applications than all OECD countries combined. The latest OECD figures on research spending also reveal that the EU average ranks below that of the US and China and, even more alarmingly, below that of the OECD average. This gives reason to intensify European research programmes.¹²⁵

- **Meet and increase Europe 2020's proposed 3% spending target** of EU-wide GDP on research. However, EU member states will most likely not reach this target. Therefore, we aim for an even higher target and propose that 4% of the EU-wide GDP are dedicated to research by 2025. This is necessary to remain internationally competitive and to guarantee our vision of a prosperous European future. Furthermore, increased research spending positively affects productivity and economic growth.¹²⁶
- **Facilitate and support diverse forms of research funding** because we are convinced that this is the best way to guarantee the freedom of science and, at

¹²² Eurostat, R&D expenditure in the EU at 2.3% of GDP in 2020, available at <https://ec.europa.eu/eurostat/en/web/products-eurostat-news/-/ddn-20211129-2>

¹²³ European Commission, Interim Evaluation of Horizon 2020, available at https://ec.europa.eu/info/publications/interim-evaluation-horizon-2020_en

¹²⁴ European Commission, Regulation (EU) 2021/695 of the European Parliament and of the Council of 28 April 2021 establishing Horizon Europe – the Framework Programme for Research and Innovation, laying down its rules for participation and dissemination, and repealing Regulations (EU) No 1290/2013 and (EU) No 1291/2013, available at <http://data.europa.eu/eli/req/2021/695/oj>

¹²⁵ The World Bank, patent application, available at http://databank.worldbank.org/data/reports.aspx?Report_Name=patent-application&id=d484ab34, For more details see EU Reform, Relationship with other multilateral institutions

¹²⁶ Vrije Universiteit Amsterdam, The Fruits of R&D: Meta-analyses of the Effects of Research and Development on Productivity, available at <https://research.vu.nl/ws/portalfiles/portal/1403389>

the same time, create incentives for public and private funding institutions to engage in research in certain seminal areas. That is why we strive to involve not only government funding institutions but also private foundations and companies. We aim to incentivise them to invest in research projects. Investments can either be of a general nature (like the German funding systems at universities), project-specific, or solution-orientated.

- **Support collaboration between universities and industry.** Both partners can learn and benefit from each other in terms of scientific approaches, strategies, funding, outcome exploitation, and so on.¹²⁷ Ultimately, this will make research efforts more productive. Create a platform where companies and research groups can meet, exchange ideas, propose projects, consider research group publications,¹²⁸ and develop trust and long-term relationships.¹²⁹
- **Highlight innovative research priorities,** such as a European satellite system or renewable energy solutions, and encourage research in European clusters, with EU funding.
- **Promote and support European journals, conferences,** interdisciplinary academic exchange and national and European academic societies.
- **Found European research institutes** (e.g. European Molecular Biology Laboratory (EMBL), European Union Institute for Security Studies (EUISS)) and a European Informatics Laboratory.
- **Open technology incubators or technology parks for tech start-ups.** Focus on technology transfer to exploit the results, translation and centralised advice on patent issues.
- **Advocate for research and science to the public,** generate enthusiasm and motivate people to participate in research. Recruit foreign talent and researchers based on free and independent ethical research and occupational stability.
- **Expand European databases and innovate the use of data** to promote new research directions.¹³⁰

¹²⁷ Journal of Education and Work, Industry–University Collaboration for Continuing Professional Development, available at <https://www.tandfonline.com/doi/abs/10.1080/1363908032000093058>

¹²⁸ Universiteit Gent, Investigating the Factors That Diminish the Barriers to University–industry Collaboration, available at <https://biblio.ugent.be/publication/2051456>

¹²⁹ MIT Sloan Management Review, Best Practices for Industry–University Collaboration Greitzer, available at <https://osp.mit.edu/sites/osp/files/uploads/bestpractices.pdf>; Praxis Auril, Making industry–university partnerships work: Lessons from successful collaborations, available at <https://www.praxisunico.org.uk/resource/making-industry-university-partnerships-work-lessons-successful-collaborations>; PLOS one, Industry–university collaborations in Canada, Japan, the UK and USA–With emphasis on publication freedom and managing the intellectual property lock-up problem, available at <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0090302>

¹³⁰ For example, Zenodo, Recent upload, available at <https://zenodo.org>

- **Support global research and innovation networks** and transform the EU into a global centre of excellence.
- **Introduce tax exemptions for R&D across the EU.** Provide public funding to research through sustainable financial instruments (debt and equity).