



Human health: Ensuring a high level of protection

A reference paper on addressing Human Health in Environmental Impact Assessment
As per EU Directive 2011/92/EU amended by 2014/52/EU

SUMMARY

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International Association for Impact Assessment

IAIA is the International Association for Impact Assessment, the leading global network on best practice in the use of impact assessment for informed decision making regarding policies, programs, plans and projects. IAIA brings together researchers, practitioners, and users of various types of impact assessment from all parts of the world.

IAIA has thirteen sections covering different aspects of impact assessment: Agriculture, Forestry, & Fisheries; Biodiversity & Ecology; Climate Change; Corporate Stewardship & Risk Management; Cultural Heritage; Disasters & Conflict; Governance and Implementation Systems; Health; Impact Assessment and Emerging Technologies; Indigenous Peoples; Public Participation; Social Impact Assessment; and Students & Young Professionals.

IAIA seeks a just and sustainable world for people and the environment. It provides the international forum to advance best practice and innovation in impact assessment and advocates for its expanded use for the betterment of society and the environment.

For more information, see www.iaia.org.

European Public Health Association

The European Public Health Association (EUPHA) is an international scientific organisation, bringing together 79 associations and institutes from 47 countries with a clear interdisciplinary, integrative and cross-cutting approach towards public health. EUPHA seeks to improve health and well-being while narrowing health inequalities across Europe, facilitating an active and strong voice of all public health networks, and by strengthening the capacity of public health professionals. EUPHA supports its members, adding value to the efforts of stakeholders in regions and states, and in national and international organisations.

The Health Impact Assessment section within EUPHA focuses on promoting the exchange of practical experience and expertise on HIA as a tool for implementing the 'Health in All Policies' principle and for addressing health inequalities in the formulations of policies, projects and programs. It intends to transform the health-research findings into improved policy and practice.

For more information, see <https://eupha.org/>.

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Foreword to ***Human health: Ensuring a high level of protection***

... the objective of [the Environmental Impact Assessment] Directive [is] to ensure a high level of protection of the environment and of human health ...

—From recital 41 of EU Directive 2014/52/EU, source (1).

The COVID-19 outbreak has ... become the most severe pandemic in the last one hundred years. The public health crisis has led to a major economic crisis which will have serious consequences for societal well-being now and in the future.

The staggering impact of COVID-19 on our society and economy has abruptly brought public health back to the top of the policy agenda. COVID-19 mortality has a clear social gradient, which is a bleak reminder of the importance of the social determinants of health.

—From *Health at a glance, 2020*. Executive summary (2).

This reference paper provides health authorities with a guide to the EIA Directive to assist in navigating the EIA process.

The EIA Directive is a crucial tool for sustainable development (3). It applies to a wide range of projects in European Union (EU) Member States, including those co-financed by the EU through its Cohesion, Agricultural and Fisheries Policies. It also applies to projects funded by the financial institutions of the EU, which operate globally and beyond the 27 EU Member States.

EIA is *ex ante*: it refers to the future. It is a forward-looking instrument. EIA provides information about a project to a decision maker before any effects have occurred. This allows for environment and health to be hard-wired into the design of a project.

Ensuring a high level of protection of the environment and of human health requires appropriate consideration of the overlapping activities of health protection, health promotion, disease prevention and health services.

Prevention also looks into the future. It too is forward-looking. It typically leads to lower rates of morbidity and mortality as well as being cheaper and more efficient than dealing with adverse effects (4) and, by keeping people healthier, it reduces demand on health services.

In *Health at a glance, 2020* (2) the Organisation for Economic Cooperation and Development (OECD) and the EU give a biennial overview of the health status of EU citizens, including trends in life expectancy, the main causes of death, health inequalities, the occurrence of communicable and chronic diseases and mental health issues. Each of these can be linked to stressors in local communities, indeed, in 2016 the World Health Organization (WHO) estimated that environmental stressors are responsible for 12–18 % of all deaths in the 53 countries of the WHO Europe Region (5).

It is increasingly understood that sustainability is not simply a concern of the physical environment. In 2019 the European Commission identified opportunities and risks for the Sustainable Development Goals (SDGs) (6). For SDG 3 *good health and well-being* the opportunities include societal involvement and participatory politics, behavioural change, corporate social responsibility and prevention and health promotion. Threats include poverty, social and health inequalities, climate change and environmental risks, ageing population, unhealthy habits and health security threats.

To build on these opportunities, and to negate these threats, we need to work together and across sectors to develop evidence-based solutions that combine the application of science with local contextual knowledge. Indeed, achieving SDG 3 will only be possible if action in other sectors and settings is also advancing (7).

EIA brings stakeholders together. It requires joint work between developers taking projects forward, Competent Authorities and other decision makers, communities that may be affected for good or bad, academia and others. EIA can foster interagency working and whole-of-government approaches.

This ‘multisectoral action’ is recommended by organisations such as the WHO (8) and in European Commission and Joint Research Centre guidelines for sustainable urban development (9). The European Green Deal requires transformations across economy, society and environment (10).

This is central to the healthy and green solutions needed for recovery from COVID-19 (11), and to the WHO’s strategic priority of promoting healthier populations with 1 billion more people enjoying better health and well-being (12). It is also central to achieving the SDGs (13).

The European Commission calls for responsible business conduct. It calls for policy coherence involving planning, evidence-based policies, inclusiveness, effectiveness, respect for subsidiarity and proportionality, and measurement and monitoring (6).

Impact assessment in general, and EIA in particular, plays an important role in meeting these vital and challenging goals.

The WHO supports impact assessment and names it as a tool for Health in All Policies (14). The WHO has supported the proper consideration of health in EIA and in Strategic Environmental Assessment (SEA) since the first Ministerial Conference on Environment and Health in 1990 (15) and also through diverse resolutions of the World Health Assembly. Guidance for health in SEA is available from the UNECE (16, 17).

This reference paper focusses on human health in EIA.

This reference paper is a collaboration between the International Association for Impact Assessment and the European Public Health Association.

It is a contribution to sustainable development and to ensuring a high level of protection of human health.

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A reference paper for health in Environmental Impact Assessment

What is this?

- S-1. This is the summary of a reference paper for health in Environmental Impact Assessment (EIA). The full reference paper is available at <https://www.iaia.org/reference-and-guidance-documents.php>.
- S-2. EIA is a decision support tool that is used at project level and which is legally required in certain circumstances.
- S-3. This summary, and the full reference paper, provide health authorities across the European Union with insights into the EIA Directive 2011/92/EU (18) as amended by 2014/52/EU (1) (hereafter the 'EIA Directive'). It provides principles and good practice for appropriately addressing health in EIA.

Why is this important?

- S-4. The EIA Directive names 'human health' among the topics to be addressed when conducting an EIA. The reference paper contributes towards a consistent coverage of human health within an EIA. It will assist health authorities in reviewing the coverage of health in EIA. It will assist other parties in addressing health in EIA.
- S-5. This reference paper arises from a collaboration between the International Association for Impact Assessment (IAIA) and the European Public Health Association (EUPHA).
- S-6. Key EIA actors for whom this reference paper is relevant:
 - The **Health Authority**, which is the local, regional or national health department that by reason of their specific health competencies and responsibilities is likely to be concerned by the health effects of the implementation of the project.
 - The **Competent Authority**, which is the authority which the Member States designate as responsible for performing the duties arising from the Directive. This is the body that determines the application for development consent, including based on their own reasoned conclusions about the likely significant health effects of the project.
 - The **Developer**, which is the applicant for development consent on a private project or the public authority which initiates a project. The Developer (and their appointed consultants) undertaken an assessment and prepare an EIA Report.
- S-7. The health authority can formally and informally support both the Competent Authority and the Developer in understanding the beneficial and adverse health implications of a project, including how opportunities to improve health could be taken.
- S-8. The following sections summarise the reference papers's key messages and good practice actions.
- S-9. The reference paper also has a set of technical appendices which provide additional information as well as tables and checklists for the stages of the assessment.

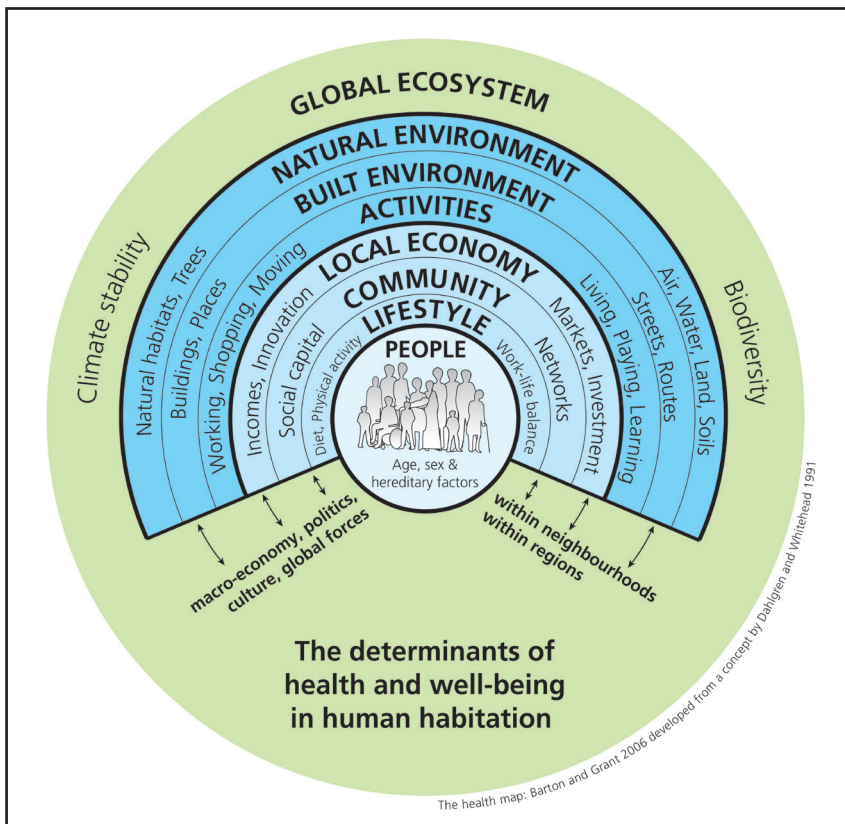
Environmental impact assessment

- S-10. EIA is a legal requirement for certain types of public and private projects that follows a structured process.
- S-11. EIA informs an application for consent to proceed with a project.
- S-12. EIA is required where the EIA Directive requires it (Annex I projects), or when a Competent Authority believes a proposed project is likely to have a significant effect on the environment, including human health (Annex II projects).
- S-13. EIA is required to identify, describe and assess in an appropriate manner the 'likely significant effects' of a project on human health and the environment.
- S-14. Health in EIA requires cross-sectoral working by both the Developer and by the Competent Authority. Good practice is to involve the health authority throughout the EIA.

Principles for human health in Environmental Impact Assessment

- S-15. The EIA Directive has left the definition of 'human health' to *competent experts* and those with *sufficient expertise*. IAIA and EUPHA as professional bodies representing impact assessors and the public health community are clear that 'human health' in EIA spans the wider determinants of health and should consider the distribution of effects within and between populations. These principles of a **comprehensive** approach to health and of **equity** should be pursued **proportionately** and with **consistency**. The reference paper, and its appendices, sets out in more detail how this can be done. Physical, social and mental health and well-being, i.e. 'human health', is determined by a broad range of factors from all sectors of society. Consideration of these wider determinants of health and their inter-relationships should inform the assessment of human health in EIA. Inter-sectoral collaboration, between public health and other sectors, should be a feature of coherent coverage of health in EIA. Figure 1 shows how the consideration of human health encompasses environmental, social and economic aspects, known collectively as determinants of health.

Figure 1: The determinants of health and well-being in human habitation



Barton and Grant (19) developed from the model by Dahlgren and Whitehead (20) and accessible in Dahlgren and Whitehead (21)

Screening

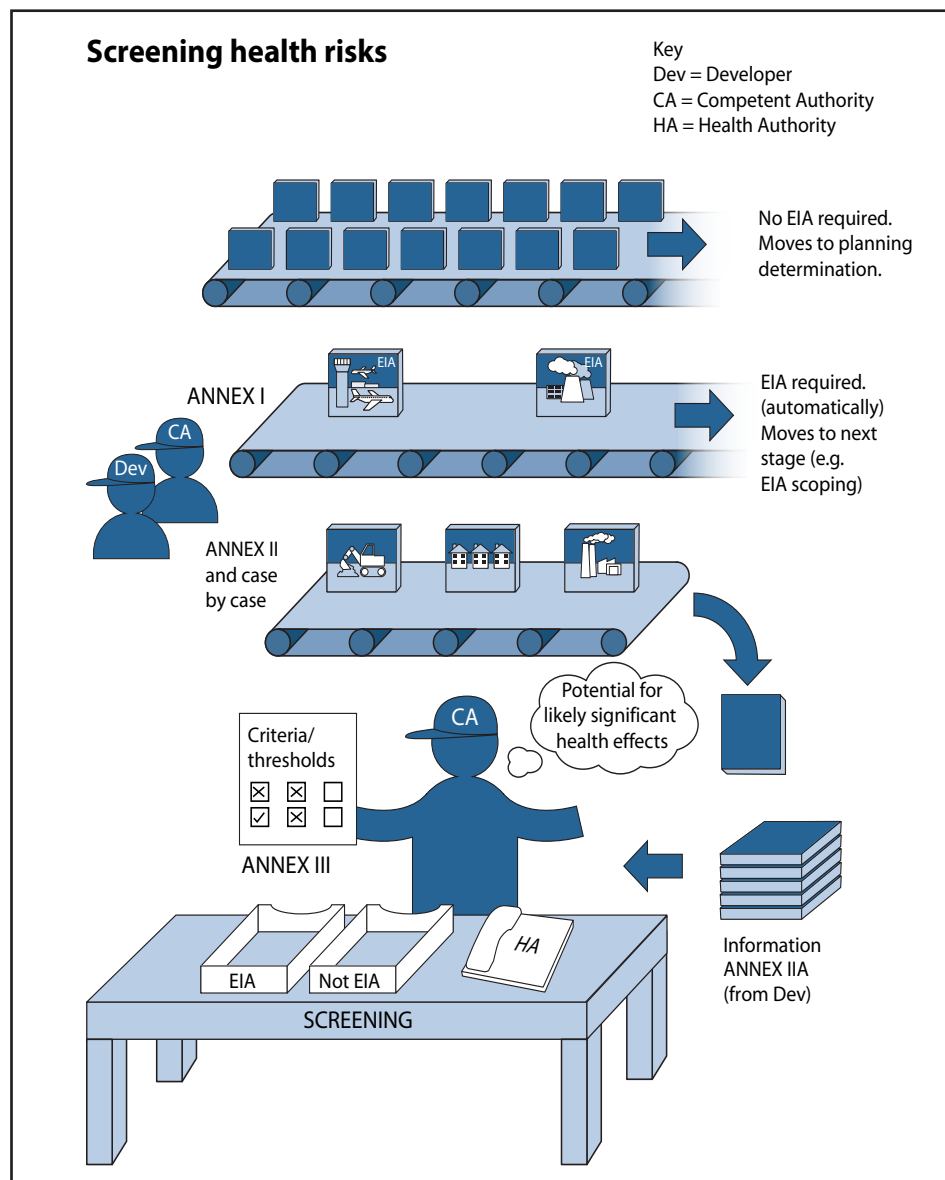
- S-16. Screening is the process of determining whether a project listed in Annex II of the EIA Directive, or referred to in case law of the Court of Justice of the European Union, is likely to have significant environmental effects. It is usually supported by thresholds set by Member States' national legislation on EIA, which may include special circumstances for environmentally sensitive areas.
- S-17. Figure 2 summarises key health-related activities and good practice during EIA screening. Screening is the process that is used to determine whether an EIA is, or is not, required. The Competent Authority undertakes screening. This is informed by specific criteria and by information about the project. Project information is provided by the Developer. Health authorities may informally advise on screening.
- S-18. The term *likely significant effect* is introduced at this stage. Significance relies on informed, expert judgement about what is important, desirable or acceptable with regards to changes triggered by the project in question.

- S-19. At the screening stage, the task is to determine a simple 'yes' or 'no' answer, with brief justification, to whether a project is likely to significantly affect health at a population level. This means reaching a preliminary conclusion as to whether the project is consistent with providing 'a high level of protection to human health'.
- S-20. At screening the level of detail may be low and the level of uncertainty may be high.
- S-21. Where health is likely to be significantly affected by a project, then it should be central to case-by-case Screening Decisions.

Good practice actions

- S-22. The Developer should seek input from those with public health knowledge in an EIA context when determining the information to submit on the characteristics of the project and its likely significant effects (including measures to avoid or prevent significant adverse health effects).
- S-23. The Competent Authority should, where decisions are made on a case-by-case basis, informally seek relevant public health advice before making the Screening Decision. This includes seeking advice on measures to avoid or prevent significant adverse health effects.
- S-24. Where population health outcomes are likely to be significantly affected by a project (including due to changes in population, air quality, water, land quality etc.), health should be central (not peripheral or secondary) to the Competent Authority's Screening Decision justification.

Figure 2: Screening, key activities and good practice



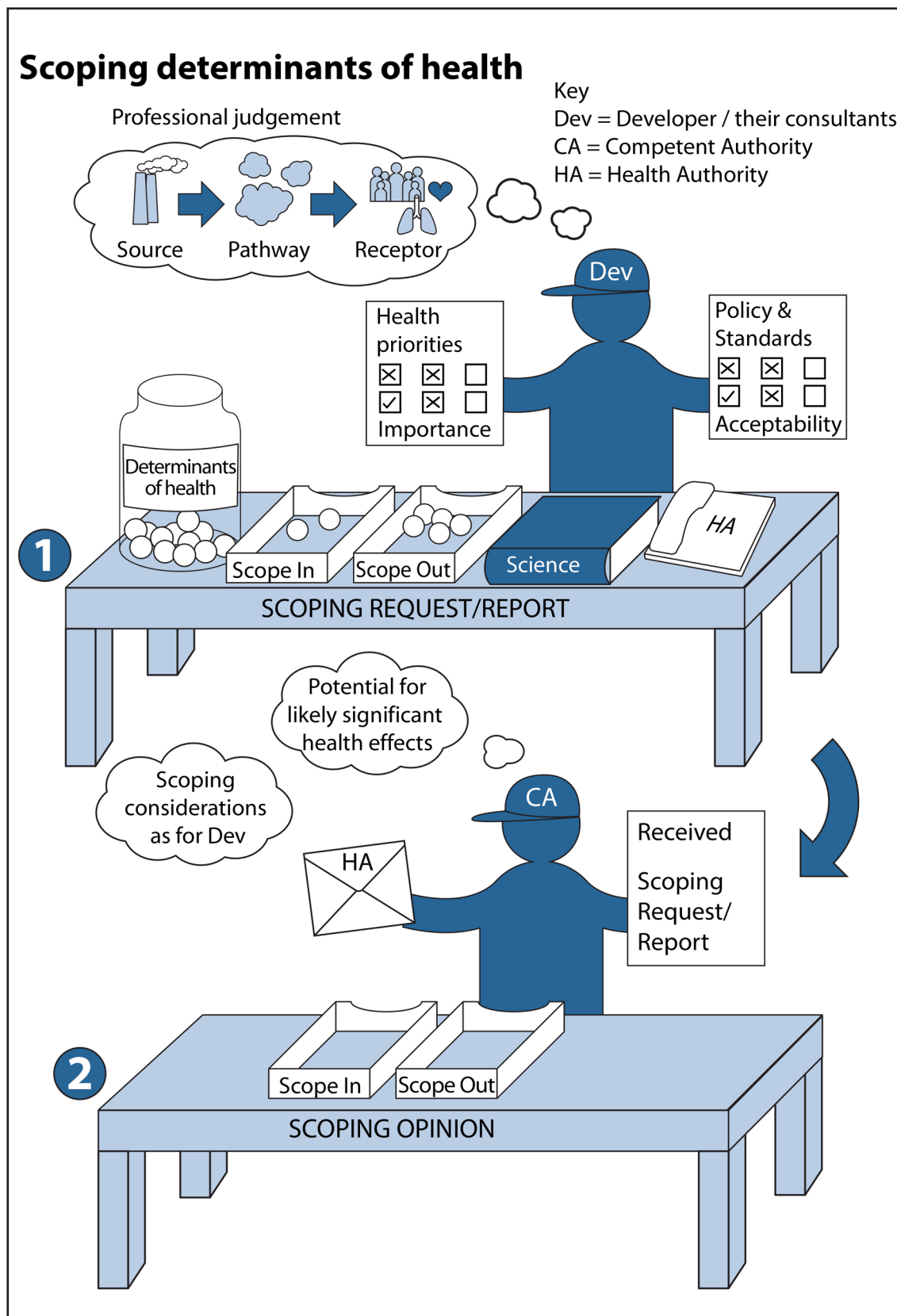
Scoping

- S-25. Scoping is the process of identifying the content and extent of the information to be submitted to the Competent Authority under the EIA process. Figure 3 summarises key health-related activities and good practice during EIA scoping.
- S-26. Scoping should determine the potential for health effects to be both 'likely' and 'significant'. If this is the case, then these issues should be 'scoped-in' for further assessment.
- S-27. Scoping health should be proportionate. Health effects that are not likely to significantly affect population health should be 'scoped-out'. A record should be kept of the reasons for scoping issues out, and of any mitigation that informs that decision. Good practice is to consult the health authority. Appendix B of the reference paper introduces concepts and tools for scoping health in line with the principles of a comprehensive approach to health, equity, proportionality and consistency.
- S-28. Scoping is not mandatory in EIA but it is good practice and most EIAs will undertake this step because it enables better planning and costing of the assessment stage and it reduces the risk of delays. Developers can determine their own scope or can ask the Competent Authority for a Scoping Opinion. Health authorities may formally or informally advise on scoping.

Good practice actions

- S-29. The Developer, in preparing an EIA Scoping Request/Report, should seek input from those with public health knowledge in an EIA context. This particularly applies when scoping the likely significant effects of a project. This includes advice on measures to avoid or prevent significant adverse health effects, as well as measures to realise health opportunities. It also includes advice on health indicators and health data.
- S-30. When preparing an EIA Scoping Opinion, the Competent Authority should seek inputs, as appropriate, from the national, regional or local body responsible for public health.
- S-31. The health authority in supporting the Developer and Competent Authority during EIA scoping should introduce the wider determinants of health and then help to focus the EIA on any likely significant health effects of the project.
- S-32. The health authority in supporting the Developer or Competent Authority during EIA Scoping should establish a proportionate health scope with reference to a transparent and consistent process for determining the potential likelihood and significance of health effects.
- S-33. The Developer and the Competent Authority should use a 'health section or chapter' so that the health authority (notably national, regional or local public health teams) can navigate to the relevant information and can then advise on the health issues across the EIA scope.
- S-34. The health authority as part of formal and informal consultation responses should request a health chapter, or health section, within the Scoping Request/Report and a health chapter within the EIA Report that brings together or cross-references the likely significant health effects.

Figure 3: Scoping, key activities and good practice



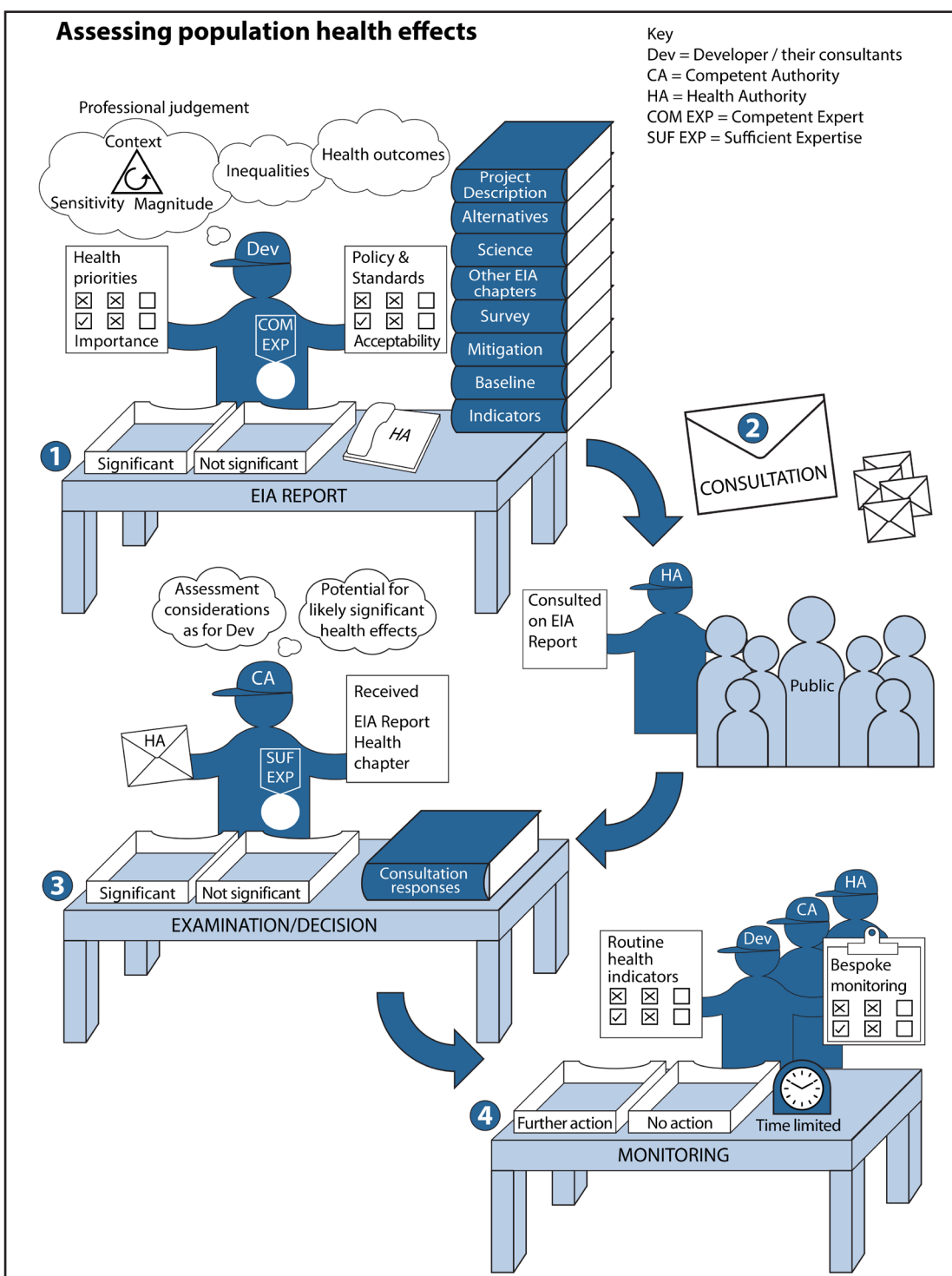
- S-35. The EIA Report is the document prepared by the Developer that presents the output of the assessment. The EIA Report is submitted by the Developer to the Competent Authority. Health authorities may informally advise during the production of the EIA Report and may then be formally consulted on the final EIA Report.
- S-36. An EIA Report should present the likely significant effects of the project, including those affecting health. It also includes a health baseline, the reasonable alternatives considered and measures to mitigate (avoid, prevent or reduce) or to monitor significant adverse effects. Good practice is to include a health chapter in the EIA Report.
- S-37. EIA takes a population health approach. Inequalities are a key feature of population health assessment, so where there is potential for significant health effects consider differences between the general population and vulnerable groups.
- S-38. Deciding whether an effect is significant relies on informed, expert judgement about what is important, desirable or acceptable with regards to changes triggered by the project in question.
- S-39. A range of criteria is used to reach a conclusion on the significance of health effects. The criteria include, but are not limited to, the sensitivity of the population and the magnitude of the effect.
- S-40. Appendix C of the reference paper explores sensitivity, magnitude and contextual factors that inform a judgment on health significance in line with the principles of a comprehensive approach to health, equity, proportionality and consistency.

Good practice actions

- S-41. The health authority in supporting the Developer to describe a health baseline, should provide advice on appropriate health-related indicators, e.g. public health indicator sets, that the project should include to facilitate assessment and future monitoring. Where feasible, it should also provide advice on how the area's future health baseline may evolve with, and without, the project, e.g. data sources identifying relevant health trends.
- S-42. The health authority should support the Developer and Competent Authority to understand whether a project has implications for health services. The health authority can also provide guidance on planning healthcare services. Useful information can include design parameters, unit costs of key services and service specifications.
- S-43. National Policy Makers should consider setting an EIA policy context at local, regional and national levels, that sets specific project level expectations for the protection and improvement of population health, including being explicit about links to relevant determinants of health. This would support reaching robust professional judgements on EIA health significance, particularly around the acceptability or desirability of particular changes from the baseline that are attributable to a particular project. The role of regulatory thresholds should be clear.
- S-44. The health authority, when drafting policy documents or other publications that set out local, regional or national health priorities, should consider specifying the role that development projects, particularly EIA projects, can play in addressing these priorities. This would provide a clear direction in the context of EIA health significance, particularly around the importance of particular project changes. This might include specifying the links to relevant determinants of health as well as appropriate summaries of the local health baseline, identifying groups that may be vulnerable and reference to scientific literature.
- S-45. The health authority in supporting the Developer or Competent Authority to identify the likely significant health effects of a project, should use a transparent and consistent process. This should encompass a proportionate but sufficiently broad range of evidence sources to establish the sensitivity of the affected population and the magnitude of the project change, as well as the importance, desirability or acceptability of the change in population health. This is in accordance with providing a high level of protection to human health, including as appropriate health protection, health promotion, disease prevention and health services.
- S-46. The health authority should be explicit in consultation responses to the EIA project that the Developer should clearly set out how health has been taken into account in the consideration of the reasonable project alternatives.
- S-47. The Developer should involve health authorities and competent experts in health in the assessment of alternatives.

- S-48. The Developer should, in addition to mitigation in relation to the likely significant negative effects of the project on health, also include enhancement measures in relation to optimising the likely significant positive effects of the project for health.
- S-49. The health authority, in supporting the Developer and Competent Authority in relation to producing or reviewing the EIA Report, should set a clear expectation for the proportionate enhancement of the likely significant positive effects of the project for health. This may include advising on the opportunities for health protection, health promotion, disease prevention and health services. Enhancements should relate to the project and not be unconnected inducements.
- S-50. Figure 4 summarises key health related activities and good practice during the EIA assessment. Assessment focuses around the production and examination of the EIA Report. Consultation, monitoring and competence are also key to the assessment of health effects.

Figure 4: EIA Report, Consultation, Examination, Monitoring and Competence, key activities and good practice



Consultation – stakeholder engagement

- S-51. Consultation is a fundamental aspect of EIA, both for the Developer in informing the scope and the assessment and for the Competent Authority in reaching its decision.
- S-52. The health authority, e.g. national, regional and local public health teams, should be consulted as a matter of good practice, ideally as a requirement of national EIA legislation.
- S-53. Scoping stage consultation with the health authority is the key opportunity for public health resources to be used efficiently in steering the project towards positive health outcomes.

Good practice actions

- S-54. National Policy Makers should specifically include relevant national, regional and local public health teams as consultees for all EIA Scoping Opinions and EIA Reports ('authorities to be consulted in general terms' pursuant to EIA Directive Article 6(1)).
- S-55. The health authority should be proactive in setting a clear expectation to be consulted at the scoping stage of all EIAs even if this is not clearly prescribed in national EIA legislation. Resources to support personnel time, inter-sectoral/administration working and training relating to EIA should be ringfenced.
- S-56. The Developer and the Competent Authority should include relevant national, regional and local public health teams as EIA consultees as a matter of course.
- S-57. National Policy Makers should require regular training of those with EIA responsibilities to facilitate good practice regarding health in EIA. Training can clarify the process and build links between sectors. This will enhance the ways in which health effects are understood and in which solutions are identified.

Monitoring

- S-58. Monitoring should be included in a proportionate way. This should cover significant adverse health effects or the implementation/effectiveness of mitigation to manage such effects.
- S-59. EIA health monitoring should avoid duplicating other legally required monitoring systems. It should also, wherever feasible, use existing routine public health indicators.
- S-60. Establish clear governance arrangements for monitoring and follow-up action (if required).

Good practice action

- S-61. The health authority should support the Competent Authority and Developer in relation to health monitoring by defining an appropriate and proportionate set of health indicators. Establish clarity on:
- use of existing indicators or the need for bespoke monitoring;
 - governance arrangements (including where anonymised or sensitive data is involved);
 - resource requirements and responsibilities (including any payments);
 - sharing of information between parties, departments and authorities;
 - duration of monitoring;
 - analysis methods;
 - trigger levels; and
 - actions in response to monitoring.

Competence and expertise for health within EIA

- S-62. The health content in the EIA Report must be prepared by 'competent experts' and the Competent Authority's review (examination) requires 'sufficient expertise'.
- S-63. Competencies for assessing health in EIA have yet to be formally defined.
- S-64. Good practice is for those involved in health in EIA, on behalf of the Developer and on behalf of the Competent Authority to have knowledge of impact assessment, public health and environmental sectors.

Good practice actions

- S-65. The health authority should promote extended specialisation on impact assessment in the training curricula of the university studies of Public Health; and extended specialisation on public health in the training curricula of the university studies of Environmental Science.
- S-66. The health authority, in supporting the Developer and Competent Authority in understanding health competence requirements, should articulate expectations about soft and technical skills required for a valid assessment of health effects.
- S-67. The Developer, in establishing the competence of those producing the EIA Report, should ensure competent health experts are included in the team of consultants, as appropriate.
- S-68. The Competent Authority, in establishing the competence of those reviewing/examining the EIA Report, should clarify requirements for experts with sufficient expertise in examining 'human health' effects and enforce such requirements when appraising EIA reports.

Conclusion

- S-69. The response to social, environmental and economic determinants that act on people's health requires multisectoral approaches.
- S-70. Providing a high level of protection to human health and moving towards sustainability requires partnerships between multiple sectors and collaborative and integrated approaches for action.
- S-71. This reference paper contributes towards a consistent coverage of human health within an EIA, the delivery of the aims and purpose of the EIA Directive, and strategies to combat environment related disease as identified by the WHO (22).
- S-72. For sustainable development including the SDGs (13) and the EU Green Deal (10) to be effective, health authorities need to play a more active role in EIA. The reference paper is a call to action for health authorities to engage with EIA so that the objective of EIA can be met. This means working with the wider determinants of health within the statutory EIA process 'to ensure a high level of protection of the environment and of human health'.
- S-73. Health authorities should be involved at all stages in the EIA process.

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