1. HOW TO SET UP MONITORING ARRANGEMENTS

How an initiative will be implemented is a key issue that should be assessed in each impact assessment in order that potential problems and monitoring needs can be sketched out. The monitoring needs initially identified will need to be updated to reflect the Commission's proposal and again in light of how the Legislator changes the Commission's proposal.

Monitoring is a continuous and systematic process of data collection about an intervention. It generates factual information for future evaluation and impact assessments and helps identify actual implementation problems.

Monitoring is necessary to allow policy makers and stakeholders to check if policy implementation is ‘on track’ and to generate information that can be used to evaluate whether it has achieved its objectives. While monitoring looks at “what” changes have occurred since the entry into force of a policy intervention, evaluation looks at "whether" the intervention has been effective in reaching its objectives, and whether the objectives have been met efficiently (i.e. at least cost), as well as the reasons for the success or otherwise of an intervention. In order to do this, an evaluation can and should collect additional data that is too expensive to monitor on a continuous basis or that measures longer-term effects.

New monitoring, and reporting requirements should follow several key principles:

- Collect only what is relevant so as to minimise administrative burden;
- Automate as much as possible with the use of IT tools to shorten data collection and processing time;
- Use common reporting standards to increase interoperability and ease sharing of data in the context of different policy areas;
- Make maximum use of existing data to save time and increase coherence of results;
- Be transparent towards the stakeholders and opt for making data publicly available, preferably as “open data” (c.f. principles of the eGovernment Action plan).

**Box 1. Defining monitoring and evaluation arrangements**

Monitoring and evaluation arrangements should be provided in the IA report ideally for the preferred option where one is specified (otherwise on the basis of the specific objectives). These should inform the essential monitoring and evaluation elements that ought to be included in the proposal itself and for preparing a detailed plan for monitoring and evaluation once the proposal is adopted by the Legislator.

1.1. What to monitor?

Monitoring is a continuous and systematic process of data collection about an intervention. It helps identify and address any implementation problems and generates factual information for future evaluation and impact assessments. It is important to note,
however, that the data collected will reflect changes due to the EU intervention and those caused by other factors.

The following can be monitored for any type of Commission initiative?468

During the life cycle of an initiative, you can monitor its:

1. **Implementation** (i.e. transposition of Directives into the national laws of Member States and, more generally, adoption of measures that are necessary to comply with/enable the legislation to be effectively applied. In case of expenditure programmes, spending money allocated to the intervention);

2. **Application** (i.e. changes observed in the realisation of the main policy objectives);

3. **Compliance and enforcement** (i.e. extent of compliance by businesses, measurements taken, inspections carried out, court cases pursued) can be monitored both during implementation and application stage – and provide useful insight into progress at both stages.

4. In addition to monitoring a progress on individual initiative, **contextual information** should be also collected (i.e. developments that are not intentionally related to the policy intervention, although they may be influenced by it, such as the economic growth, break-through technologies, new behavioural patterns etc.).

1.2. **Data sources**

Many legal measures supporting interventions contain provisions requiring the production of different documents on the performance of an intervention at a given point in time. Member States may have to report on what they have done in accordance with the policy or regulation, or the Commission may conduct its own assessment of its own or Member State actions. Examples include implementation reports, interim evaluations, and reviews of the current state of play in the implementation and application of the EU measure. Different reports contain different kinds of data and information, serving different purposes, particularly depending on the time they are written in the policy cycle.

A wide range of external actors, including the European Parliament, Member States, NGOs, think tanks and consultants, also produce reports on various aspects of EU activities or areas where EU interventions combine with a range of other actions being undertaken. These external contributions can also prove valuable sources of information, confirming or diverging from the findings emerging from the Commission's own work (For further information on data sources please refer to Common tool on "Information (Evidence) gathering").

When collecting data, attention should be paid to International classification. Classification systems are tools which allow for harmonised registration of data. The

468 Data collected throughout monitoring will encompass qualitative as well as quantitative variables.
Commission uses these international classifications in order to collect high-quality and harmonised/comparable data.\textsuperscript{469}

1.3. \textbf{Setting up a monitoring System}

When defining new monitoring arrangements, you need to assess whether the existing ones (still) serve their purpose, i.e. whether they provide valuable and timely information for the policymaking process.\textsuperscript{470} In doing so, you should answer the following questions:

- \textbf{What data is collected and how is it used?} How and by whom are data used?\textsuperscript{471} Are all the data needed for the purpose for which they were collected? If not, why not? Are they used for other purposes?

- \textbf{How is data collected?} To what extent do monitoring structures already exist? By whom is data collected (e.g. the Commission, Member States, intermediaries such as Agencies, operators/beneficiaries, etc.)?

You should always consider a possibility for streamlining the existing reporting requirements (e.g. pooling them across policies, simplifying via web-based electronic collection etc.).

Before proposing new data requirements, you should carefully assess to what extent the existing data reflect the objectives set. If you identify missing key data that will need to be collected, you need to explain in detail what the data will be used for and whether they can be collected via existing monitoring structures. If the additional data collection implies significant administrative burden – be it for businesses, citizens, or public authorities – you need to measure it through the Standard Cost Model and demonstrate that it is proportionate vis-à-vis the identified data (and policy) needs.

In defining your monitoring arrangements, you should:

- Ensure that the monitoring system works from the outset and that adequate (legal) provisions are in place to ensure that data from Member States or from third parties will be collected reliably and smoothly; data and statistics are not always easy to get from the outset; many indicators can only be created and developed when the instrument is implemented, because you need the cooperation and agreement of stakeholders in developing them and in collecting the relevant information.

- Make adequate use of the collected data by ensuring the soundness and reliability of the proposed methods and instruments for collecting, storing and processing follow-up data;

- Design indicators that will allow collection of data relevant for improving the implementation and later evaluation of the policy intervention;

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\textsuperscript{469} A good place to find relevant data is the EU's open data portal: https://open-data.europa.eu/en/data/

\textsuperscript{470} A first assessment of monitoring systems in place should be provided in the relevant evaluations.

\textsuperscript{471} Beware that collected data need to be analysed to make them into useful information.
Consider the cost of setting up and maintaining a monitoring system over the time life of an intervention should also be taken into account among the cost impacts of options.

2. **INDICATORS**

An indicator is a quantitative or qualitative measure of how close we are to achieving a set goal (e.g. policy outcome). They help to analyse and compare performance across population groups or geographic areas, and can be useful for determining policy priorities. Indicators should only give one perspective of the performance of a policy intervention, which is highly dependent on the type of indicator selected, data, other influences, etc.. It is important, therefore, to use other complementary approaches to monitoring, such as qualitative analysis or surveys.

When choosing appropriate indicators the following issues should be considered.

- Data should be readily available and of a good quality, ideally at national/regional level if appropriate;
- Indicators should capture the impacts due to the policy intervention within a reasonable length of time but exclude other influences if possible;

The European Commission’s Competence Centre on Indicators and Scoreboards (based at JRC) can provide support and advice.

2.1. **Setting up indicators**

There is no clear-cut rule on the appropriate level of detail for indicators – this will depend on the type of initiative, the complexity of the intervention logic and the hierarchy of objectives constructed for a particular intervention. In principle, however, the "smarter" the policy objective, the easier it is to define a corresponding indicator.

Before you can start monitoring whether your initiative performs as expected, you will need to assess whether and how it has been implemented. At this stage, the spending programmes and regulatory proposals will differ the most:

For a **spending programme**, you will need to know how the money allocated to the intervention has been spent (for example, 20 kilometres of road built).

In the case of a **regulatory proposal**, in addition to its adoption by Council and Parliament, and its transposition into the national laws of the Member States in case of a Directive (both steps are important parameters in monitoring the implementation process), you will need to know which key types of measures have been put in place in order to comply with the regulatory requirements (by the Commission, Member States or other actors).
### Table: Examples of monitoring indicators

<table>
<thead>
<tr>
<th>Stage in the policy cycle</th>
<th>Monitoring</th>
<th>Examples of indicators</th>
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<tbody>
<tr>
<td><strong>Implementation</strong> (\text{&quot;outputs&quot;})</td>
<td>Indicators relate to results of implementation of an intervention – i.e. deliverables that need to be generated in order to achieve its objective(s).</td>
<td>Kilometres of roads built, scholarships awarded, consultancy services developed, standards developed, databases created, labelling requirements designed and implemented, etc.</td>
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<tr>
<td><strong>Application</strong> (\text{&quot;results and impacts&quot;})</td>
<td>Indicators aim at monitoring what concretely the policy intervention intends to achieve, i.e. raison d''être of your policy. They represent changes over the short, medium and long term which can be directly linked to the application of the intervention. These indicators should include monitoring both the direct, as well as any significant indirect or unintended impacts of an intervention. They should be closely related to the identified problems and their drivers.</td>
<td>Safety incidents at EU level, tax compliance, innovations/new products generated in the sector, time saved by users of a road, survival rate of businesses, consumption of low fat, low sugar food, mutual recognition of nationally approved products, permissions/derogations granted, bans introduced, e-invoices exchanged cross-border, tax declarations filed, etc.</td>
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### Table: Examples of links between objectives and indicators

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Core indicators</th>
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| Development of organic production\(^{472}\) | • share of organic area in total utilised agricultural area  
• share of organic livestock in total livestock  
• number of certified organic operators |
| Effectiveness in curbing emissions\(^{473}\) | • new vehicle fuel consumption  
• CO\(_2\) emissions for each heavy-duty vehicle category |
| Improved balancing in gas transmission systems\(^{474}\) | • liquidity on the gas wholesale markets  
• volumes in trading at the intraday gas market  
• price convergence between gas markets |
| Reduction of energy consumption and promotion of energy efficiency\(^{475}\) | • energy label rating of units sold  
• saving on space heating |

\(^{472}\) [http://eur-lex.europa.eu/resource.html?uri=cellar:fbf11871-b33f-11e3-86f9-01aa75ed71a1.0001.01/DOC_1&format=PDF](http://eur-lex.europa.eu/resource.html?uri=cellar:fbf11871-b33f-11e3-86f9-01aa75ed71a1.0001.01/DOC_1&format=PDF)  
To the extent possible, all indicators should be ‘RACER’, i.e.:

1. **Relevant**, i.e. closely linked to the objectives to be reached. They should not be overambitious and should measure the right thing (e.g. a target indicator for health care could be to reduce waiting times but without jeopardising the quality of care provided).

2. **Accepted** (e.g. by staff, stakeholders). The role and responsibilities for the indicator need to be well defined (e.g. if the indicator is the handling time for a grant application and the administrative process is partly controlled by Member States and partly by the EU then both sides would assume only partial responsibility).

3. **Credible** for non-experts, unambiguous and easy to interpret. Indicators should be simple and robust as possible. If necessary, composite indicators might need to be used instead – such as country ratings, well-being indicators, but also ratings of financial institutions and instruments. These often consist of aggregated data using predetermined fixed weight values. As they may be difficult to interpret, they should be used to assess broad context only.\(^ {476}\)

4. **Easy** to monitor (e.g. data collection should be possible at low cost).

5. **Robust** against manipulation (e.g. administrative burden: If the target is to reduce administrative burdens to businesses, the burdens might not be reduced, but just shifted from businesses to public administration).

If necessary, proxy indicators might need to be used to represent a phenomenon in the absence of a direct indicator. They may also help us to monitor things that are difficult to ‘measure’ in practice such as illegal migration, counterfeits, social inclusion etc. When using proxies, however, you need to understand well the underlying causal links and the limitations of using proxies.

At the end of the process, it would be useful to summarise the system of indicators and monitoring in tabular form:

<table>
<thead>
<tr>
<th>Operational objective</th>
<th>Indicator</th>
<th>Definition</th>
<th>Unit of measurement</th>
<th>Data source</th>
<th>Frequency of measurement</th>
<th>Baseline</th>
<th>Target</th>
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\(^ {476}\) Various categories of indicators exist, such as qualitative/quantitative, local/global, monetary-non-monetary, etc.