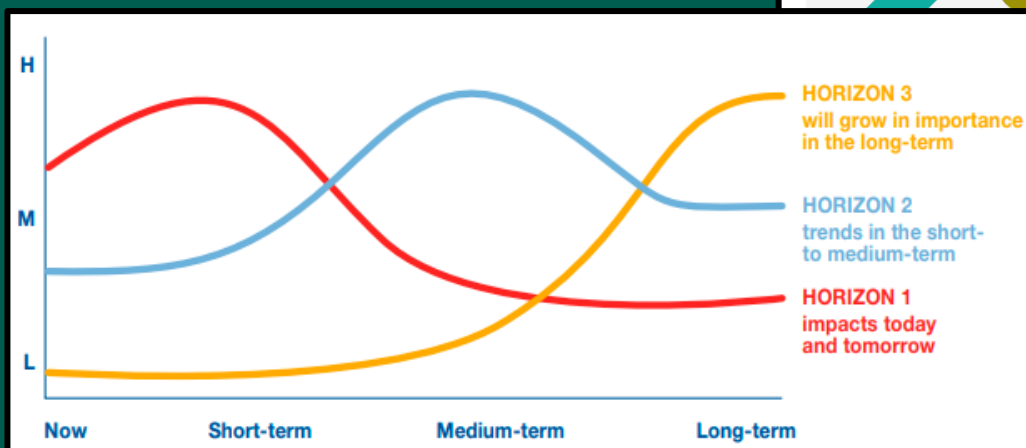


# Horizon Scanning Presentation Speaking Notes



Created by: Enterprise Risk Management

Version 1

## Appendix 1: Horizon Scanning Module Slides and Speaking Notes



Welcome to our Enterprise Risk Management training on Horizon Scanning. I'm [X], part of the ERM team. In this presentation, we'll cover what Horizon Scanning is and how it helps identify future risks and opportunities.

You'll learn the steps for conducting a Horizon Scanning assessment, see real world examples, and get tips for using our templates. We will wrap up with some multiple choice questions to test your understanding. Let's get started.



## Learning Objective

To become familiar with what Horizon Scanning is as a supporting tool within the risk management process.

## Module Content

- ✓ What is Horizon Scanning?
- ✓ How Horizon Scanning relates to risk management?
- ✓ Illustrative examples
- ✓ Horizon Scanning engagement template

By the end of this session, you'll:

- Be introduced to the concept and purpose of Horizon Scanning.
- Understand how it relates to risk management.
- Gain further understanding of it as a process through illustrative examples.
- Know where there are further supports for conducting a Horizon Scanning exercise.



# What is Horizon Scanning?

Let's begin with what is Horizon Scanning?



## What is Horizon Scanning?



Horizon Scanning can be **defined** as the exploration of what the future might look like to understand uncertainties better and to analyse whether the organisation is adequately prepared for potential opportunities and threats.

*[Horizon Scanning: A Practitioner's Guide]*

So what is Horizon Scanning?

Here we have a definition taken from “Horizon Scanning: a Practitioners Guide” which is also referenced in the policy on page 62.

*“Horizon Scanning can be **defined** as the exploration of what the future might look like to understand uncertainties better and to analyse whether the organisation is adequately prepared for potential opportunities and threats.”*

Note the use of the word ‘opportunities’ as well as threats – it is not always negative uncertainties that are on the horizon.



## Definitions of Horizon Scanning

*"Horizon scanning helps us to better understand emerging trends and early-stage technologies. The process of horizon scanning is to provide a clear view of new innovations, drugs and technologies, which have the potential to improve care for patients". [NHS](#)*



*Organisation for Economic Co-operation and Development (OECD): horizon scanning is "a technique for detecting early signs of potentially important developments through a systematic examination of potential threats and opportunities, with emphasis on new technology and its effects on the issue at hand" ([OECD, n.d.a](#)).*



Various organisations define Horizon Scanning differently.

The NHS uses it to identify emerging health technologies that could improve patient care.

The OECD describes it as detecting early signs of important developments to assess potential threats and opportunities, especially with new technologies.



## HSE Definition of Horizon Scanning



### Horizon Scanning

A tool to examine future threats and opportunities before they occur across the short, medium or longer term. Particularly useful when it comes to emerging risks.

In the HSE, Horizon Scanning is *“a tool to examine future threats and opportunities before they occur across the short, medium or longer term. Particularly useful when it comes to emerging risks”*

Horizon Scanning is a forward-looking process that helps us anticipate future risks and opportunities. It’s not just about spotting potential threats but also about identifying emerging trends and innovations that could benefit us. For example, staying updated on regulatory updates, technological advancements, and demographic changes is important for our strategic planning.

Simply put, in the HSE, Horizon Scanning is about examining future threats and opportunities across short, medium, and long terms. It’s especially useful for identifying emerging risks.

## **HE** Horizon Scanning everyday illustrative example



When undertaking a long journey, you scan ahead for any obstacles, changes in circumstance, or signs that could disrupt your plans. This will inform what response you are to take.

Think of Horizon Scanning like driving a car. Just as you scan the road ahead for potential obstacles or indeed, better routes, Horizon Scanning involves looking ahead to identify emerging trends, potential disruptions, and opportunities that could impact our Health Service.



## HE Other organisational example

**Table 1** Global health priorities ordered by probable timeframe

Timeframe	Issue
< 5 years	<ul style="list-style-type: none"><li>Pandemic preparedness and prevention</li><li>Vaccine distribution</li><li>Machine learning for antibiotic discovery</li><li>Apps for disease screening</li><li>Coordinated biobanking</li><li>Addressing misinformation and disinformation</li><li>Using real-world evidence</li></ul>
5–10 years	<ul style="list-style-type: none"><li>Biosensor-based point-of-care diagnostic methods</li><li>Artificial intelligence-assisted clinical reasoning support systems</li><li>Pull-through drug development</li><li>Genetically engineered phage therapy</li><li>Digital health and surveillance</li></ul>
≥ 10 years	<ul style="list-style-type: none"><li>Telemedicine</li><li>Microbiome-based therapies</li><li>Migrant health</li></ul>

<https://www.who.int/publications/i/item/9789240044173>

Here we demonstrate a practical example from the World Health Organisation that carried out a Horizon Scanning exercise for global public health in 2020 and 2021. The group identified 15 new and emerging technologies and scientific advances that may have a significant impact on global health over the next two decades.

As you can see, they applied different timeframes: under 5 years, 5-10 years, and over 10 years. This helps in planning for immediate, medium-term, and long-term impacts.



## What is Horizon Scanning - Recap

To recap:

- We began by defining the purpose and structure of this training session, aiming to familiarise you with Horizon Scanning as a tool in risk management.
- We then set out that Horizon Scanning is a proactive process to identify future risks and opportunities by exploring uncertainties and assessing our preparedness.
- We looked at how various organisations, including the NHS and OECD, define Horizon Scanning differently, but all emphasize its role in detecting early signs of future threats.
- We reviewed the HSE's definition of Horizon Scanning, including an everyday example and a real world example from the World Health Organisation.



## How Horizon Scanning relates to risk management

Now let's look at Horizon Scanning and how it relates to the HSE's Enterprise Risk Management process.



**Table 2: Sources and Approaches for Identifying Risks**

Potential Sources of Information	
Risk Registers	Complaints/Surveys/Investigation Reports
Internal and External Audit Reports	Incident/Near Miss Tracking and Trending
Press	Incident Review Reports
Reviews	Non-conformance reports/performance reports
Policies, Procedures, Protocols and Guidelines	
Examples of Approaches to Identifying Risks	
PESTLE analysis	Benchmarking
Bow-tie Analysis	Meetings/committees
Risk assessment workshops	Data Protection Impact Assessment
Brainstorming	<u>Horizon Scanning</u>
Questionnaires/Surveys	

Following on from the theory, we want to now look at how Horizon Scanning relates to risk management.

Set out in the Enterprise Risk Management Policy and Procedures is how Horizon Scanning can be used as an approach for identifying risks, highlighted here from Table 2 of the policy and procedures.

As can be seen, there are other approaches to identifying risk, which can be dependent on the style, size and complexity of the circumstances. For this module we are just focusing on the Horizon Scanning Tool.



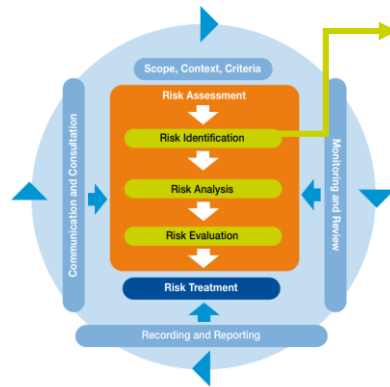
To further support this, included in the policy is the Three Horizons Model, shown here. It is a strategic framework that helps us manage risks over different timeframes:

- Horizon 1 the red line, shows the timeframe for immediate actions and current operational risks.
- Horizon 2 the blue line shows the timeframe for medium-term trends and strategic initiatives.
- Horizon 3 the yellow line shows the timeframe for long-term uncertainties and transformative changes.





## Risk Identification



HSE Enterprise Risk Management Process

### Risk Identification (Section 2.2.1)

Use the Three Horizons framework to **systematically identify risks across different time frames**. Engage stakeholders to provide insights and identify potential risks in each horizon.

Use the Horizon Scanning template provided in the ERM policy to **document risks** and assign them to the appropriate horizon.

So let's review Horizon Scanning through the HSE's Risk Management Process lens.

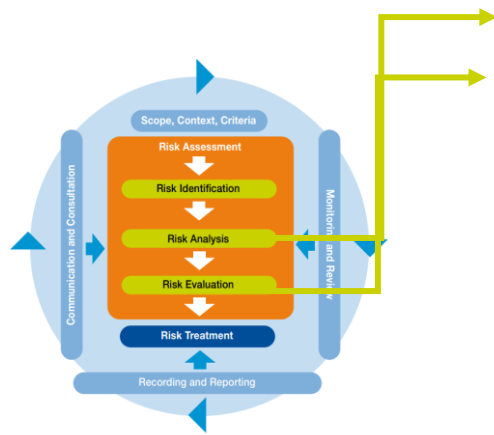
In Risk Identification (Section 2.2.1) we can use the Three Horizons framework to identify risks across the different time frames. This is done through engagement with relevant stakeholders to provide insights and identify potential risks in each horizon.







# Risk Analysis and Evaluation



## Risk Analysis & Evaluation (Sections 2.2.2 & 2.2.3)

Use the ERM policy to **categorise their impact.**

Categories by Risk Impact
Harm to a Person (service user, patient, staff & public)
Service User Experience
Business/Service Disruption/Security (unauthorised and/or inappropriate access to systems/assets including data)
Loss of Trust/Confidence or Morale (Public/Staff), including reputational risk
Organisational Objectives or Outcomes
Compliance (legislative, policy, regulatory including data)
Financial (including performance to budget, claims, etc.)
Environmental/Infrastructure/Equipment
Strategic Programme/Project (objectives/timeframes) – HSE Executive Use Only

Page 16, HSE Enterprise Risk Management Policy and Procedures 2023

After using the template to document the risks identified and assign them to the appropriate horizon, you can then utilise the ERM policy to categorise the risk by their impact.

The HSE ERM Policy and Procedures, page 16, provides additional guidance on the categories of risk, as shown here on the table to the right hand side.



## Risk Analysis and Evaluation

### **Risk Analysis & Evaluation (Sections 2.2.2 & 2.2.3)**

Horizon 1: Analyse and evaluate immediate risks **using current information and reports**. Determine the likelihood and impact.

Horizon 2: Use **emerging trends and available information** to evaluate medium-term risks. Consider strategic objectives and how these trends could affect the Health Service.

Horizon 3: Evaluate long-term risks by considering **scenarios**. Assess the potential impact of changes and how they could disrupt the Health Service.

The next step is to carry out a risk analysis and evaluation (Sections 2.2.2 and 2.2.3)

Using the Three Horizons model:

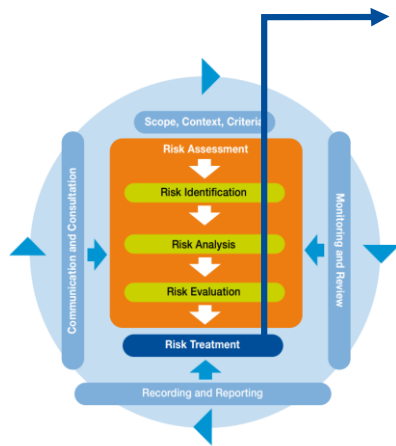
Horizon 1: Analyse and evaluate immediate risks **using current information and reports**.

For Horizon 2: Use **emerging trends and available information** to evaluate medium-term risks. Consider strategic objectives and how these trends could affect the organisation.

Horizon 3: Evaluate long-term risks by considering potential scenarios. Assess the potential impact of changes and how they could disrupt the organisation.



## Risk Treatment



HSE Enterprise Risk Management Process

### Risk Treatment (Section 2.3)

Develop treatment plans for each horizon.

Horizon 1: focus on the effectiveness of **immediate control measures** and action plans.

Horizon 2: plan strategic initiatives **and allocate resources to address emerging trends**.

Horizon 3: **develop contingency plans** and build flexibility into strategic planning.

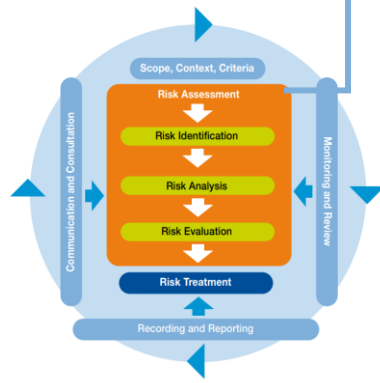
Next, would be the development of Risk Treatment plans (Section 2.3)

Again, going through the risks identified within each horizon:

- **Horizon 1:** Focus on immediate control measures and action plans.
- **Horizon 2:** Plan strategic initiatives and allocate resources for emerging trends.
- **Horizon 3:** Develop contingency plans and build flexibility into strategic planning.



## Monitoring and Review



HSE Enterprise Risk Management Process

### Monitoring and Review (Sections 2.6 & 3.8)

**Regularly review and update** the risk register to reflect changes in your area of responsibility across all three horizons. Ensure continuous monitoring and reassessment of risks as new information becomes available.

**Use the Three Horizons Model to guide periodic reviews** and ensure that all time frames are considered in the risk management process.

### Monitoring and Review (Sections 2.6 and 3.8)

We need to regularly review and update our risk register to reflect outcomes of the Horizon Scanning. This means monitoring and reassessing risks as new information becomes available.

We use the Three Horizons Model to guide these reviews and make sure we consider all timeframes. The outcome of this Horizon Scanning is to aid decision making and determine if a full risk assessment is required.

By regularly reviewing risks across these horizons, we can address immediate issues, adapt to new trends, and prepare for future uncertainties.

Regular Horizon Scanning is important for the HSE to stay prepared and adapt or respond to future challenges/changes. By involving the right people and conducting scans at appropriate intervals, we can better manage risks and ensure high-quality healthcare delivery.

Regular Horizon Scanning is important for the HSE to stay prepared and adapt or respond to future challenges/changes.

By involving the right people and conducting scans at appropriate intervals, we can better manage risks and ensure high-quality healthcare delivery.



## Monitoring and Review

- Horizon Scanning is performed by senior management and department heads/managers with the involvement of key stakeholders to include advisors, healthcare professionals, and frontline staff who provide valuable insights from their experience.
- It is recommend that a full Horizon Scan is carried out when significant changes occur and/or annually to stay updated on new risks and trends in healthcare.

Here's examples of who should perform a Horizon Scan:

- **Senior management:** They oversee the corporate plan, NSP and strategy and can identify long-term trends affecting healthcare.
- **Department heads and managers:** They understand the specific risks within their departments or units.
- **Key stakeholders:** This includes external advisors, healthcare professionals, and frontline staff who provide valuable insights from their experience.

It is recommend that a full Horizon Scan is carried out when significant changes occur and/or annually to stay updated on new risks and trends in healthcare.



## How Horizon Scanning relates to risk management - Recap

To recap:

We've discussed Horizon Scanning using the risk management process lens for risk identification, analysis, evaluation and treatment perspective.

We discussed how monitoring and regular review to the risk register are important to stay prepared.



## Illustrative Examples

Let's look at some examples of Horizon Scanning applied in different contexts. The following examples are used for illustrative purposes and are not real life examples from within our Health Service.



## Example 1 – for illustrative purposes only



**Risk < 5 Years:** Failure to implement new European Union (EU) regulations in a timely manner, such as the Medical Device Regulation (MDR) and the In Vitro Diagnostic Regulation (IVDR).

First is an illustrative example related to healthcare. The new EU regulations set out here are aimed at improving patient safety and transparency, require substantial changes in compliance procedures, documentation, and reporting standards.

The risk could be described as:

Failure to implement the new European Union (EU) regulations in a timely manner, such as the Medical Device Regulation (MDR) and the In Vitro Diagnostic Regulation (IVDR). The risk is assessed with the potential to materialise in **< 5 years**.

# Example 1 – for illustrative purposes only

Enterprise Risk Management		Horizon Scanning Template	
Business Objective	Timely compliance with statutory and regulatory obligations		
Date	2024		
< 5 Years			
Insert category of potentially affected area, e.g. financial, regulatory	High Impact If assessed as 'High Impact' provide detail available to date and potential impact	Medium Impact If assessed as 'Medium Impact' provide detail available to date and potential impact	Low Impact If assessed as 'Low Impact' provide detail available to date and potential impact
Compliance - The implementation of new European Union (EU) regulations, such as the Medical Device Regulation (MDR) and the In Vitro Diagnostic Regulation (IVDR).	The increased administrative burden and potential delays in medical device availability can significantly affect healthcare delivery. Higher compliance costs may strain financial resources, particularly for smaller healthcare providers and suppliers. The comprehensive nature of these regulations may require significant changes in procedures, making the impact substantial. These regulations, aimed at improving patient safety and transparency, require comprehensive changes in compliance procedures, documentation, and reporting standards.		

Shown here is how it can be captured on the template.

### Key Points to Capture:

- **Category:** Compliance
- **Timeframe:** < 5 Years
- **Impact Level:** High
- **Details:** Administrative burden, delays in device availability, higher costs, procedural changes.

Again, this example, as shown here, is for illustrative purposes only.

## HE Example 1 – for illustrative purposes only



### Potential Treatment:

Early and comprehensive planning for compliance with new regulations.  
Enhanced training programmes for staff on new regulatory requirements.  
Collaboration with EU regulatory bodies to streamline processes.

Addressing the challenges posed by new regulations is important for continued success and compliance.

In this example it has been determined the **Potential Treatment will include:**

- Early and comprehensive planning for compliance with new regulations.
- Enhanced training programs for staff on new regulatory requirements.
- Collaboration with EU regulatory bodies to streamline processes.

By implementing these risk treatment strategies proactively, we aim to not only meet but exceed regulatory expectations, ensuring operational efficiency and maintaining our commitment to compliance.

## **HF** Example 2 - for illustrative purposes only



**Risk 5 - 10 Years:** The proliferation of digital health technologies, including telemedicine, electronic health records (EHRs), and mobile health applications, brings regulatory challenges related to data privacy, cybersecurity, and interoperability.

We now look at another illustrative example over the next 5 to 10 years, that is and as shown here, the rapid expansion of digital health technologies will present significant regulatory challenges.



## Example 2 – for illustrative purposes only

Enterprise Risk Management		Horizon Scanning Template	
Business Objective	To ensure information is retained in a secure manner		
Date	2024		
< 5 Years			
Insert category of potentially affected area, e.g. financial, regulatory	High Impact if assessed as 'High Impact' provide detail available to date and potential impact	Medium Impact if assessed as 'Medium Impact' provide detail available to date and potential impact	Low Impact if assessed as 'Low Impact' provide detail available to date and potential impact
5 to 10 Years			
<b>Security</b> - The proliferation of digital health technologies, including telemedicine, electronic health records (EHRs), and mobile health applications, brings regulatory challenges related to data privacy, cybersecurity, and interoperability.		Data breaches and cyberattacks pose serious risks to patient privacy and can undermine trust in digital health solutions. Compliance with data protection regulations and ensuring interoperability require ongoing effort but are manageable with proper planning. The rapid pace of technological change necessitates continuous updates to regulatory frameworks, making this a moderately impactful area.	

Shown here is how it can be captured on the template.

### Key Points to Capture:

- **Category:** Security
- **Timeframe::** 5 to 10 Years
- **Impact Level:** Medium
- **Details:** Key areas of concern include data privacy, cybersecurity, and interoperability of digital health solutions.

Again, this example, as shown here, is for illustrative purposes only.

## **HF** Example 2 – for illustrative purposes only



### **Potential Treatment:**

Implementation of robust cybersecurity measures and regular security audits. Development of clear guidelines and standards for digital health technologies. Strengthening data protection frameworks to ensure patient privacy.

**Potential Treatment could include** the implementation of robust cybersecurity measures and regular security audits. Development of clear guidelines and standards for digital health technologies and strengthening data protection frameworks.

Again by implementing these risk treatment strategies proactively, we aim to not only meet but exceed regulatory expectations and ensure patient privacy.



## Illustrative Examples Recap

To recap:

We have walked through examples of how Horizon Scanning was used to anticipate new EU medical device rules and adapt to digital health trends, helping us manage risks effectively.



## **Horizon Scanning Engagement Framework**

Now that we have introduced the concept of Horizon Scanning, its application by way of risk management and shared some illustrative examples, next is a brief overview of what supports are in place for you to engage with colleagues in carrying out a Horizon Scanning exercise.





# Horizon Scanning Engagement Framework



## Horizon Scanning Template

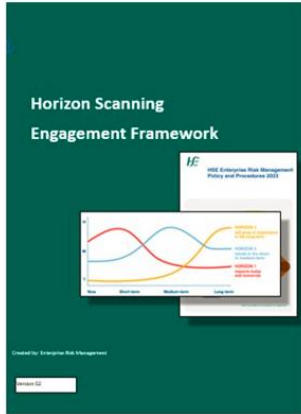
Business Objective			
Date			
Insert category of potentially affected area, e.g. financial, regulatory	< 5 Years		
	High Impact If assessed as 'High Impact' provide detail available to date and potential impact	Medium Impact If assessed as 'Medium Impact' provide detail available to date and potential impact	Low Impact If assessed as 'Low Impact' provide detail available to date and potential impact
	5 to 10 Years		
	> 10 Years		

As set out earlier, there is information and materials available on the HSE website to support you on your Horizon Scanning journey.

First, the policy and procedures give details on the Horizon Scanning as a tool to use in risk management and is informed by the Three Horizons Model. Also set out is a Horizon Scanning template, a blank version of which is available on the supporting tools website.



# Horizon Scanning Engagement Framework



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Supporting Tools: <https://www.hse.ie/eng/about/who/riskmanagement/risk-management-documentation/hse-enterprise-risk-management-supporting-tools/>

To further assist you with Horizon Scanning engagements with your colleagues, a brief four page 'Horizon Scanning Engagement Framework' has been developed, shown here, and available on the supporting tools website.

This sets out all the elements that are required to engage with relevant stakeholders including the resources, tools and each step to follow in the process.

It includes the learning objectives and agenda for the engagement as well as suggested timeframes for each step of the process and materials that will be required.



# Horizon Scanning Engagement Framework



Supporting Tools: <https://www.hse.ie/eng/about/who/riskmanagement/risk-management-documentation/nse-enterprise-risk-management-supporting-tools/>

To further inform the engagement, and by way of assistance, a copy of the slides and speaking notes of this module, are also available on the supporting tools website, for referencing during the engagement, or should you wish to bring colleagues through the content in advance of a Horizon Scanning engagement.



## Horizon Scanning Engagement Framework Recap

To recap:

The Horizon Scanning Engagement template is there to assist you in preparing and meeting with colleagues and stakeholders in carrying out a Horizon Scanning engagement.

Copies of these slides and speaking notes are also made available to further enhance the understanding in this area.

Remember to use all the available templates and tools for effective Horizon Scanning.



**Thank you**

In conclusion, in this module's training on Horizon Scanning we have set out to assist your understanding of Horizon Scanning in enterprise risk management by defining it and exploring how it helps us identify current risks, focus on emerging trends, and get ready for future uncertainties.

We introduced a Horizon Scanning template to help document and analyse potential risks effectively and provided worked examples to assist in completion of templates. We then signposted the templates for Horizon Scanning engagements so as to equip you with a set of tools to help anticipate future risks and opportunities.

For any further questions or assistance, please refer to the ERM Policy and Procedures 2023 and the HSE website or contact the ERM team at [erm.queries@hse.ie](mailto:erm.queries@hse.ie) if you have any further queries.

Thank you for your attention.