



Programme

IAEA Training Workshop on a Systemic Approach to Safety – Pragmatic Solutions

**IAEA Headquarters
Vienna, Austria**

29 March – 1 April 2016

Conference Room MOE100 – Ground Floor M-Building

Ref. No.: J8-TR-50390

International Atomic Energy Agency

Tuesday March 29, 2016

Time	Session	Facilitator(s)
08:00 – 09:15	Registration Gate 1, Vienna International Centre	All Participants
09:00 – 09:30	Opening remarks Introduction <ul style="list-style-type: none"> • Why a training workshop on the systemic approach to safety • The basis of Systemic Approach to safety in the IAEA Safety Standards 	Monica Haage, IAEA All Participants
09:30 – 10:00	Module 1 – Presentation on Shared Space <ul style="list-style-type: none"> • Role of perceptions and projections in shaping engagement • Healthy power dynamics • Characteristics of shared space • Ways of communicating 	Germaine Watts Canada
10:00 – 10:30	Module 2 – Presentation on Lessons Learned related to the IAEA Fukushima Report <ul style="list-style-type: none"> • Brief look at the HOF conclusions related to Systemic Approach to Safety 	Monica Haage, IAEA
10:30 -10:45	<i>Break</i>	
10:45 – 11:45	Module 3 – Presentation on Introduction to Human and Organizational Factors <ul style="list-style-type: none"> • Influences on the human side of safety • Organizational factors - common organizational prerequisite and organizational safety components • Connecting organizational safety components to organizational resilience components • HTO and the systemic approach 	Patrik Lundell, Sweden
11:45 – 13:00	<i>Lunch</i>	
13:00 – 14:00	Module 4 – Dialogue on Role of Middle Managers <ul style="list-style-type: none"> • Scope of the role • Real and perceived impact of the role • Challenging realities of the role in achieving safety 	Germaine Watts Canada
14:00 – 15:00	Module 5 – Role Game on Emergent Exercise – <ul style="list-style-type: none"> • An experience of how events emerge in ways that are impossible to predict • Creating an experience through a game that demonstrates the connection between HOF theory and the work of middle managers in practice 	Patrik Lundell, Sweden
15:15 – 15:30	<i>Break</i>	
15:30 – 16:00	Module 5 – Cont'd Debrief on the Emergent Exercise - Role Game <ul style="list-style-type: none"> • Notice what happened between the persons involved • Reflecting on the leadership, communication and teamwork • Questions: <i>How were your behaviour influenced by the actions and attitudes by the once around you?</i> 	Patrik Lundell, Sweden Germaine Watts, Canada Stan Deetz, USA
16:00 – 16:45	Module 6 – Presentation and Dialogue on the Individual Sense-making <ul style="list-style-type: none"> • Sense making and the social construction of reality • Exploration of the impact of individual sense-making in a real-life scenario (brought in or generated by the participants) 	Stan Deetz, USA
16:45 – 17:00	Log out – Learnings from the day	Monica Haage, IAEA

Wednesday March 30, 2016		
Time	Session	Facilitator(s)
09:00 – 09:15	Log in - Learnings from Previous Day	All
09:15 – 10:15	Module 7 – Presentation on Enhancing HOF in Defence-in-Depth (DiD) <ul style="list-style-type: none"> • Practical method of objective trees for assessment of comprehensiveness of DiD • Consideration of links between technological systems and human factors for identification of weaknesses in DiD • Applying the Objective Trees for Assessment of Internal/External HOF in DiD and identification of improvements • How a Systemic perspective supports the realization of DiD provisions 	Jozef Misak, Slovakia Germaine Watts Canada
10.15 -10.30	<i>Break</i>	
10:30 – 11:45	Module 8 – Presentation on Fukushima, DiD and HTO <ul style="list-style-type: none"> • Weakness in the application of Defense in Depth concept • Implications for approaches/methodologies for safety • Systemic perspective on underlying issues 	Akira Omoto, Japan
11:45 – 13:00	<i>Lunch</i>	
13:00 – 14:00	Module 9 – Presentation and Demonstration on Complexity – An Example of a System of Stakeholders <ul style="list-style-type: none"> • Mapping of stakeholders and potential interests around Fukushima accident • Look at the role of middle managers and the impact of stakeholder choices • Influence of equipment and technological factors • Emergent complexity 	Stan Deetz, IAEA Akira Omoto, Japan
14:00 – 15:00	Module 10 – Card Game on Emergent Complexity <ul style="list-style-type: none"> • Another experience of how events emerge in ways that are impossible to predict • Bringing human and organizational dynamics into an emerging situation • Using the systemic perspective to form a more integrated understanding of risks and ways to respond • Reflecting on personal preferences on how to respond in unexpected situations 	Patrik Lundell, Sweden
15:00 – 15:15	<i>Break</i>	
15:15 – 16:15	Module 10 Card Game Cont'd – Emergent Complexity	Patrik Lundell, Sweden
16:15 – 16:45	Module 11 – Debrief on – Card Game <ul style="list-style-type: none"> • Reflection on how the incorporation of system thinking (HTO) influenced their understanding • Did this change your conception of the role of middle manager • Reflection on how the role of middle manager can make difference 	Patrik Lundell, Sweden Monica Haage, IAEA Gemaine Watts, Canada
16:45 – 17:00	Log out – Learnings from the day Homework assignment	Monica Haage, IAEA

(Homework – reflecting about what are *my chronic systemic challenges* in my work life, what I learned so far apply to my work situation)

Thursday March 31, 2016

Time	Session	Facilitator(s)
09:00 – 09:15	Log-in - Learnings from Previous Day	All Participants
09:15 – 10:30	Module 12 – Intro Soft System Mapping <ul style="list-style-type: none"> • Understanding individual behavior as a function of multiple factors in a system of relationships • Applying the systemic perspective in a middle manager role: shifting from blaming difficult people to having difficult conversations • Using Soft System Mapping (SSM) as a process of discovery and making implicit systemic relations explicit 	Stan Deetz, USA
10:30 -10:45	<i>Break</i>	
10:45 – 11:45	Module 13 – Systemic Mapping – Group Exercise <ul style="list-style-type: none"> • Mapping the scenario of the sea water injection (hierarchy, lost communication, different sense making, different “agendas”, time, complexity etc) • Individually apply the SSM process to a challenging situation • Interactively produce a systemic map for a commonly occurring problem 	Akira Omoto, Japan Jozef Misak, Slovakia Stan Deetz, USA
11:45 – 13:00	<i>Lunch</i>	
13:00 – 15:00	Module 14 – Dialogue on Systematic Intervention in Systems <ul style="list-style-type: none"> • Applying a systemic approach to formulating interventions to solve problems and increase performance • Presenting different hands-on methods and tools for overcoming human and organizational challenges and increasing resiliency • Managing from the middle – allowing human system redundancy to become more resilient • Drop the illusion of having control, seek to reduce error likely situations and increase error tolerance in the system • Q&A on past experiences and new ways of thinking 	Stan Deetz, USA
15:00 – 15:15	<i>Break</i>	
15:15 – 16:45	Module 15 – Presentation and Exercise on Humble Inquiry <ul style="list-style-type: none"> • Understanding the power of asking questions • Enhancing engagement, learning, and performance through questions • Tailoring questions to the needs of different situations • A brief exercise giving participants the opportunity to apply the art of asking questions 	Germaine Watts Canada
16:45 – 17:00	Log out – Learning from the day Reminder - Homework assignment	Monica Haage, IAEA
18:00 - 21:00	Social Event	All

Friday April 1, 2016

Time	Session	Facilitator(s)
09:00 – 09:15	Log in - Learnings from Previous Day	All Participants
09:15 – 10:15	Module 16 – Dialogue on Working Differently - Sharing the Homework Assignment – Systemic Realities <ul style="list-style-type: none"> • Interactively experience working through one or more of the real-life situations generated by the participants 	Germaine Watts Canada Stan Deetz, USA Patrik Lundell
10:15 -10:30	<i>Break</i>	
10:30 – 11:45	Module 17 – Dialogue on Working Differently – Applying Systemic Tools <ul style="list-style-type: none"> • In small groups, work on understanding participant situations and applying SSM to identifying potential intervention points and strategies 	Monica Haage, IAEA Stan Deetz, USA
11:45 – 13:00	<i>Lunch</i>	
13:00 – 14:45	Module 18 – Action Plan: Instilling a Systemic Approach to Safety <ul style="list-style-type: none"> • What do you do Monday morning? • Write a letter to your self - What will my organization look like in a year and what do I need to do differently to make that change happen? • Review of key terms • Planning on how to apply the systemic approach • Where to learn more 	Monica Haage, IAEA Martin Miksits, Austria Stan Deetz, USA Akira Omoto, Japan
14:45 – 15:00	<i>Break</i>	
15:00 – 16:00	Module 19 – Reflection: The Learning Journey & Evaluation Wrap-up	All Participants