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### Definition of information security culture

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# 1 Introduction

The research program Security Culture and Information Technology, SECURIT<sup>8</sup>, aims at providing novel knowledge and insights on social aspects of information security. This is essential for comprehensive information security approaches corresponding to the needs arising in contemporary societies. To reflect the various aspects of information security culture, the SECURIT research program includes researchers with different research backgrounds, such as psychology, philosophy, informatics, political science, cyber security, and cognitive science.

To facilitate the collaboration between the researchers contributing to the SECURIT program, a common definition of information security has been formulated. The formulation of the definition has been achieved through a number of sessions with the participation of researchers representing the different research areas. These sessions resulted in the following definition of information security culture.

*Shared patterns of thought, behaviour, and values that arise and evolve within a social group, based on communicative processes influenced by internal and external requirements, are conveyed to new members and have implications on information security.*

In Swedish, the resulting definition of information security culture was formulated as:

*Gemensamma tanke-, beteende- och värderingsmönster som uppstår och utvecklas i ett socialt kollektiv genom kommunikativa processer baserade på inre och yttre krav, som traderas till nya medlemmar och som har implikationer för informationssäkerhet*

In the remainder of this document, the sessions performed to achieve this common definition of information security culture are described.

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<sup>8</sup> The SECURIT program is funded by the Swedish Civil Contingencies Agency (MSB) and coordinated by the Swedish Defence Research Agency (FOI). The research is jointly performed by Chalmers University of Technology, FOI, the Royal Institute of Technology, the University of Gothenburg, and Örebro University in cooperation with Linköping University. Karlstad University coordinates and supports the Swedish IT Security Network for PhD students (SWITS) with funding from SECURIT. The program was launched in July 2012 and is planned to continue through June 2017.

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## 2 The sessions resulting in the definition of information security culture

The definition of information security culture presented in this document has been formulated through an iterative process including four sessions performed during the period February 2013 to February 2014.

### 2.1 Session 1

The first session took place in Örebro, Sweden and included two iterations on February 12 and 13, 2013. At this time, the definition was only formulated in Swedish.

Participants:

Magnus Frostenson, Jonas Hallberg, Sven Ove Hansson, Karin Hedström, Björn Johansson, Fredrik Karlsson, Martin Karlsson, Ella Kolkowska, Anders Pousette, Frans Prenkert, Kalle Räisänen

The resulting definition of information security culture:

*Gemensamma tankemodeller, beteende- och värderingsmönster som ett socialt kollektiv tillägnar sig genom förhandling baserat på inre och yttre krav, som traderas till nya medlemmar och som påverkar informationssäkerhet.*

### 2.2 Session 2

The second session took place in Katrineholm, Sweden June 11, 2013. At this time, the definition was formulated in English as well as Swedish.

Participants:

Jonas Hallberg, Sven Ove Hansson, Karin Hedström, Fredrik Karlsson, Martin Karlsson, Henrik Karlzén, Ella Kolkowska, Björn Lundgren, Anders Pousette, Frans Prenkert, Kalle Räisänen, Maria Skyvell Nilsson, Teodor Sommestad, Marianne Törner, Rogier Woltjer, Joachim Åström, Svante Ödman

The resulting definition of information security culture (Swedish):

*Gemensamma tankemodeller, beteende- och värderingsmönster som uppstår i ett socialt kollektiv genom förhandling baserat på inre och yttre krav, som traderas till nya medlemmar och som påverkar informationssäkerhet*

The resulting definition of information security culture (English):

*Joint patterns of thought and behaviour that arise within a social group, based on a negotiative process influenced by internal and external requirements, are transmitted to new members and have implications on information security*

### 2.3 Session 3

The third session took place in Katrineholm, Sweden November 6, 2013. Also this time, the definition was formulated in English as well as Swedish.

Participants:

Tom Andersson, Jonas Hallberg, Sven Ove Hansson, Peter Johansson, Fredrik Karlsson, Martin Karlsson, Henrik Karlzén, Ella Kolkowska, Björn Lundgren, Tomas Olovsson, Teodor Sommestad,

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Patrik Thunholm, Svante Ödman

The resulting definition of information security culture (Swedish):

*Gemensamma tanke-, beteende- och värderingsmönster som uppstår i ett socialt kollektiv genom förhandling baserat på inre och yttre krav, som traderas till nya medlemmar och som påverkar informationssäkerhet*

The resulting definition of information security culture (English):

*Joint patterns of thought, behaviour, and values that arise within a social group, based on a negotiative process influenced by internal and external requirements, are transmitted to new members and have implications on information security*

## 2.4 Session 4

The fourth session took place in Katrineholm, Sweden February 27, 2014. The result from this session is presented as the final result in this document. In this section, the English and Swedish definitions are included.

Participants:

Tom Andersson, Joakim Berndtsson, Magnus Frostenson, Jonas Hallberg, Sven Ove Hansson, Sofie Hellberg, Peter Johansson, Fredrik Karlsson, Henrik Karlzén, Ella Kolkowska, Björn Lundgren, Niklas Möller, Anders Pousette, Frans Prenkert, Maria Skyvell Nilsson, Teodor Sommestad, Marianne Törner, Rogier Woltjer, Svante Ödman

The resulting definition of information security culture (Swedish):

*Gemensamma tanke-, beteende- och värderingsmönster som uppstår och utvecklas i ett socialt kollektiv genom kommunikativa processer baserade på inre och yttre krav, som traderas till nya medlemmar och som har implikationer för informationssäkerhet*

The resulting definition of information security culture (English):

*Shared patterns of thought, behaviour, and values that arise and evolve within a social group, based on a communicative process influenced by internal and external requirements, are conveyed to new members and have implications on information security*