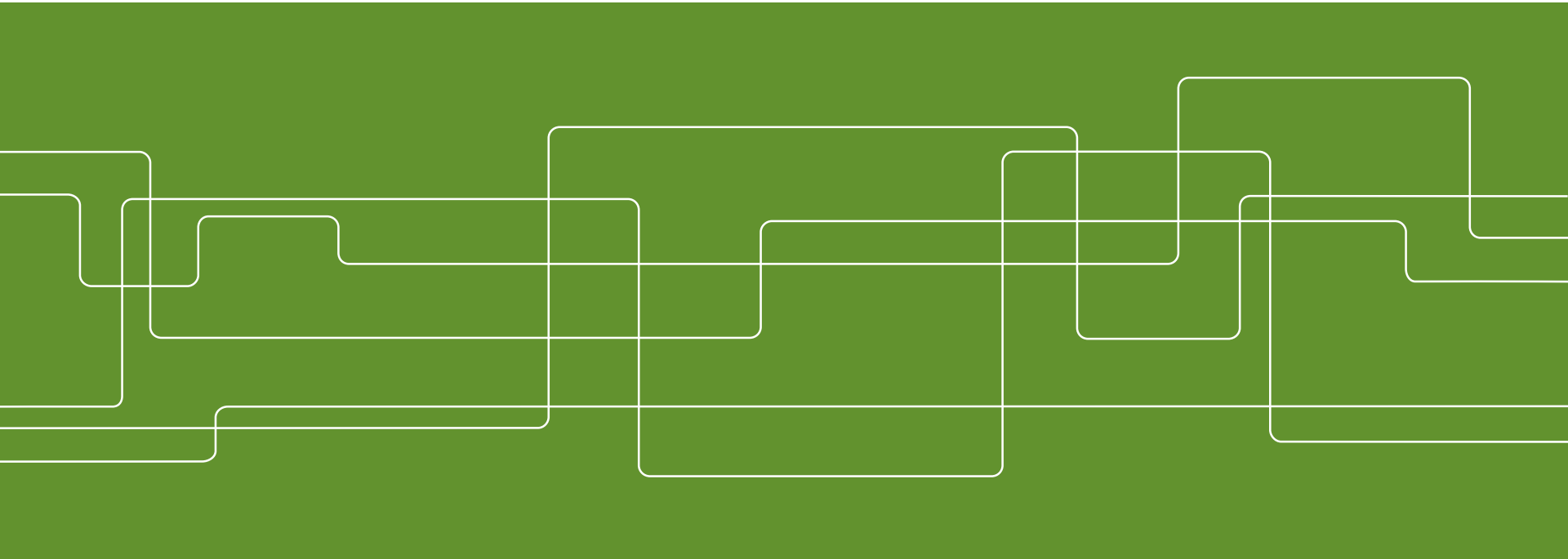# Integration of Ethics and Sustainable Development—Communication Systems

Markus Hidell, Director TCOMM master's programme

Program Level Learning Objectives

Facts (Faktakunskaper)
Identify and describe examples of sustainability aspects related to the subject area of communication systems

Understanding (Förståelse)
orally and in writing give examples of and explain social, ethical as well as environmental aspects of sustainable development in the area of communication systems

Analysis (Analys)
based on different definitions of sustainable development illustrate and point out perspectives where advancements in information and communication technology can be of relevance for different types of sustainable development in the society

Values (Värdering)
from a few basic theories and definitions compare and value possibilities and limitations of information and communication technology in the society and people's responsibility for how it is used in a sustainability perspective, including social, ethical, and environmental aspects

Learning Activities and Examination

Activity	Examination
Interactive lectures	Mandatory presence and active participation
Discussion exercise	Hand in prepartion assignment and active participation in seminar
Writing exercise, basic	Smaller part in written report which is already part of the examination
Reflection seminar	Short written reflection, peer review, and group presentation
Methodolgy exercise	Active participation, process, written and oral presentation
Project work	Written and oral presentation and opponent on other group's work
Writing exercise, avanced	Part of master thesis—written reflections in final report

Carriers of Ethics and Sustainability Track

II2202 Research Methodology and Scientific Writing
P1, year 1
Interactive lectures and basic writing excise, intro

IK2215 Advanced Internetworking
P1, year 1
Interactive lecture and discussion exercise, "green networks"

IK2206 Internet Security and Privacy
P2, year 1
Reflection seminar with focus on ethics

IK2217 Advanced Internetworking II
P3, year 1
Deeper discussion exercise, "Internet-of-Things"

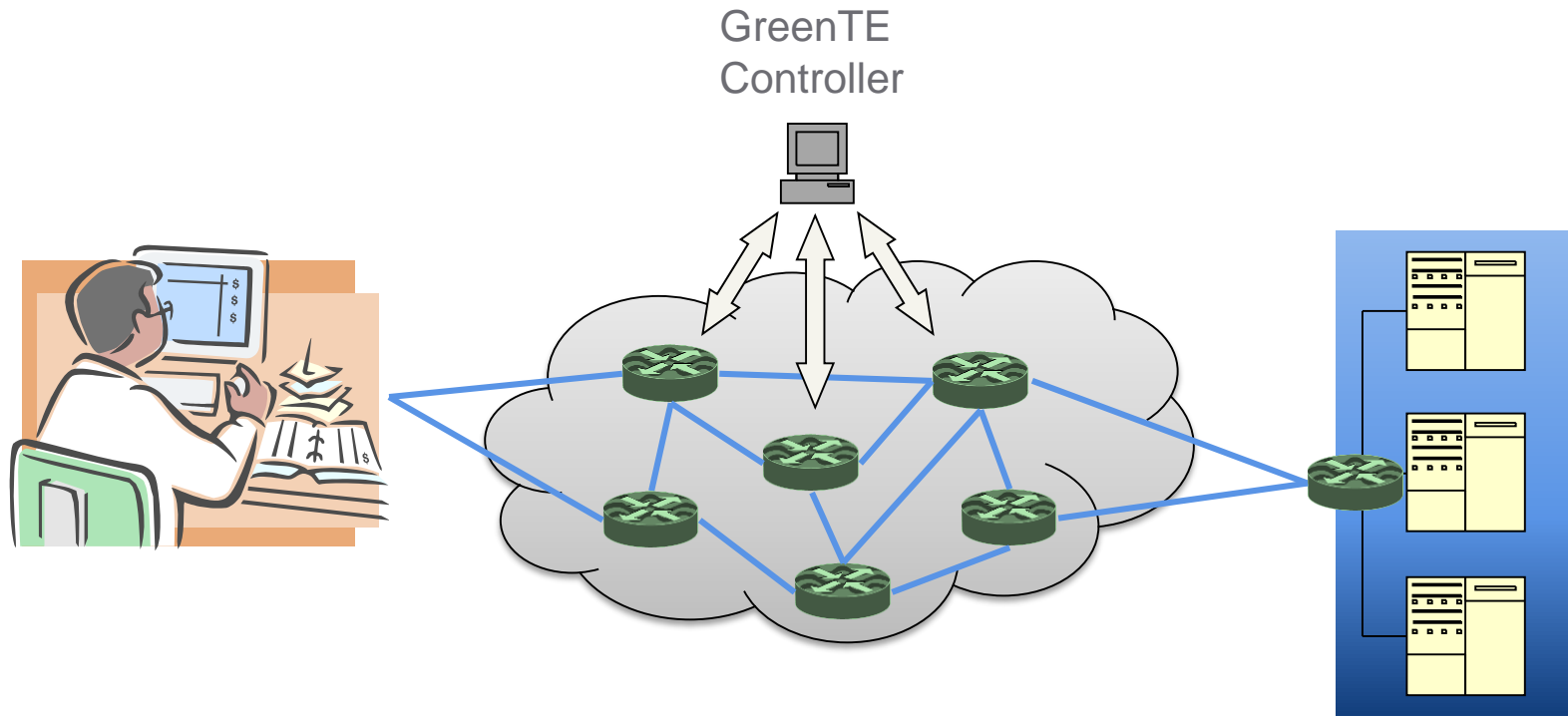IK2200 Communication System Design
P1-P2, year 2
Methodology exercise and project work, "SD in the project"

IK223X Master Thesis in Communication Systems
P3-P4, year 2
Advanced and deeper writing exercise, reflections in final report

Example of Subject Area: "Green Networks"

GreenTE
Controller

Achieving Programme Learning Objectives

Objective 1	Objective 2	Objective 3	Objective 4
II2202	II2202		
IK2215	IK2215		
IK2206	IK2206	IK2206	
IK2217	IK2217	IK2217	
IK2200	IK2200	IK2200	IK2200
IK223X	IK223X	IK223X	IK223X