

TABLE OF CONTENTS

	<i>page</i>
Introduction	
PRIVATE INTERNATIONAL LAW, CIVIL LIABILITY REGIMES AND AI: OPEN ISSUES	1
 Chapter 1 INTRODUCTORY REMARKS ON ARTIFICIAL INTELLIGENCE AND A METHODOLOGICAL PREMISE FOR A PRIVATE INTERNATIONAL LAW ANALYSIS	
Section I – GENERAL REMARKS ON ARTIFICIAL INTELLIGENCE	
1. Technological evolution: the advent of AI-systems	7
2. The role of domestic and supranational legislators in regulating the development and use of AI-systems	14
Section II – A PRIVATE INTERNATIONAL LAW ANALYSIS OF AI: METH- ODOLOGICAL PREMISE	
3. The harmonization of European substantive provisions on non-con- tractual liability relating to AI-systems	20
4. Conflict of laws provisions on non-contractual liability relating to AI- systems: the state-of-the-art at the domestic, international and EU level	27
5. The heads of jurisdiction in the Brussels I-Recast Regulation and their application to non-contractual obligations relating to AI-systems	33
6. The methodological approach adopted by the Rome II Regulation and its relevance for AI-systems	37

Chapter 2

THE SUBSTANTIVE PROVISIONS ON PRODUCT LIABILITY
RELATING TO AI-SYSTEMS IN EU LAWSection I – AN ANALYSIS *DE LEGE LATA*

- | | |
|---|----|
| 1. Product strict or fault-based liability regimes: AI-systems and the need to define new roles and liabilities along the value chain | 45 |
| 2. EU Directive No. 85/374: understanding the framework | 53 |
| 3. <i>Sequitur</i> : the technological development risk defense clause. An (un)balanced solution between innovation and user protection | 64 |
| 4. EU Directive No. 85/374 and AI-systems: a difficult integration | 67 |
| 5. <i>Sequitur</i> : the need for a legislative intervention | 72 |

Section II – AN ANALYSIS *DE LEGE FERENDA*

- | | |
|--|----|
| 6. The EU regime relating to the development and use of AI-systems: an overview of the harmonized rules provided for in the European Artificial Intelligence Act | 75 |
| 7. The strict liability regime proposed in the new EP Resolution for a regulation on AI-systems civil liability | 86 |

Chapter 3

CONFLICT OF LAWS PROVISIONS ON PRODUCT LIABILITY:
A COMPARATIVE AND HISTORICAL DEVELOPMENT

- | | |
|---|-----|
| 1. A general overview | 97 |
| 2. The US v. EU approach on jurisdiction | 99 |
| 3. The US v. EU approach on choice of law | 106 |

Chapter 4

THE PRELIMINARY STEP OF LEGAL CHARACTERIZATION
OF AI-SYSTEMS

- | | |
|---|-----|
| 1. The irrelevance of the different theories of the legal characterization in private international law | 117 |
| 2. The ECJ interpretative criteria and their reflex on private international law | 121 |
| 3. <i>Sequitur</i> : the approach to characterization in European private international law | 126 |

	<i>page</i>
4. The AI-systems: a way toward a European uniform definition	133
5. <i>Sequitur</i> : AI-software as goods or services according to the relevant EU provisions and the ECJ case law	136
6. <i>Sequitur</i> : the software as a product according to the relevant European and international substantive and private international law provisions	142
7. The need for, and relevance of, an appropriate private international law approach to AI-systems related liability	147

Chapter 5

JURISDICTION IN MATTERS RELATING TO AI-SYSTEMS

1. The Brussels I-Recast Regulation: a general overview	153
2. The special head of jurisdiction for non-contractual obligations relating to AI-systems	158
3. <i>Sequitur</i> : the ubiquity theories applied to “complex” scenarios: multi-localized damages	165
4. <i>Sequitur</i> : on-line damages	169
5. Party autonomy as head of jurisdiction and AI-systems	172
6. An assessment of the Brussels I-Recast Regulation regime and AI-systems	175

Chapter 6

THE LAW APPLICABLE TO MATTERS RELATING TO AI-SYSTEMS

1. The EU Regulation Rome II: a general overview	177
2. The connecting factor of party autonomy: an appropriate tool for AI-systems	182
3. The challenges in applying the main connecting factor in Rome II to AI-systems	185
4. <i>Sequitur</i> : the common habitual residence and AI-systems	190
5. <i>Sequitur</i> : the safeguard clause and AI-systems	192
6. The potential relevance of the special provision on product liability for AI-systems	193
7. The need for a flexible approach: the case of environmental damages	197

	<i>page</i>
8. The relevance of overriding mandatory provisions and of public policy	200
9. <i>De jure condendo</i> solutions: the ubiquity theory and a special choice of law rule for AI-systems	204
Concluding remarks	
TOWARDS A SUSTAINABLE TECHNOLOGICAL DEVELOPMENT	207
AUTHOR'S INDEX	221