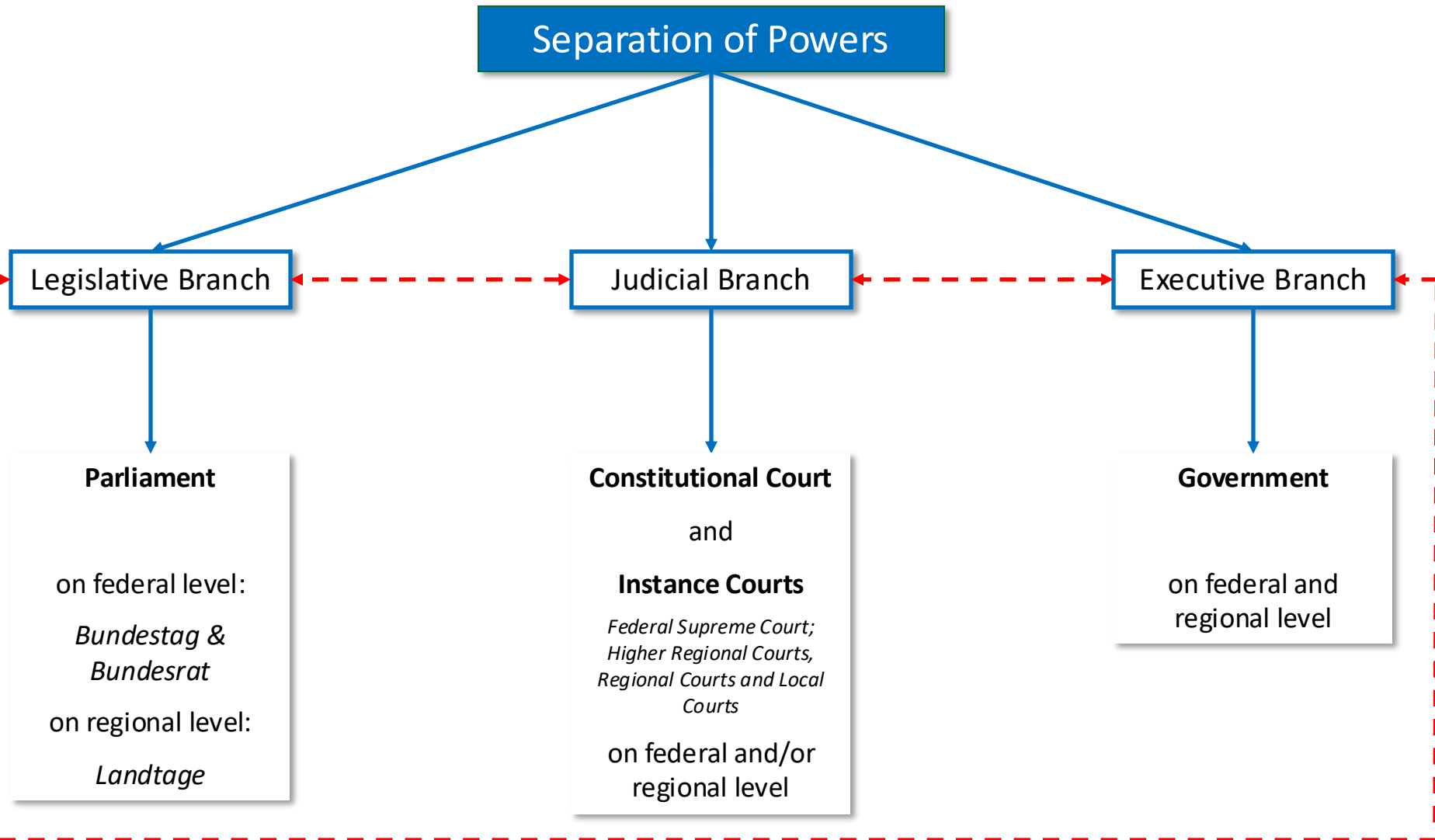


Courts and the Role of Judges

12. Constitutional Foundations (1)



12. Constitutional Foundations (2)

Procedural Rights

Access to Justice

Art. 20 (3) BL

Due Process

Art. 20 (3) BL

Equality before the
Law

Art. 3 BL

Fair Trial

Art. 103 (1) BL

Legally Designated
Judge

Art. 101 (1) 2 BL

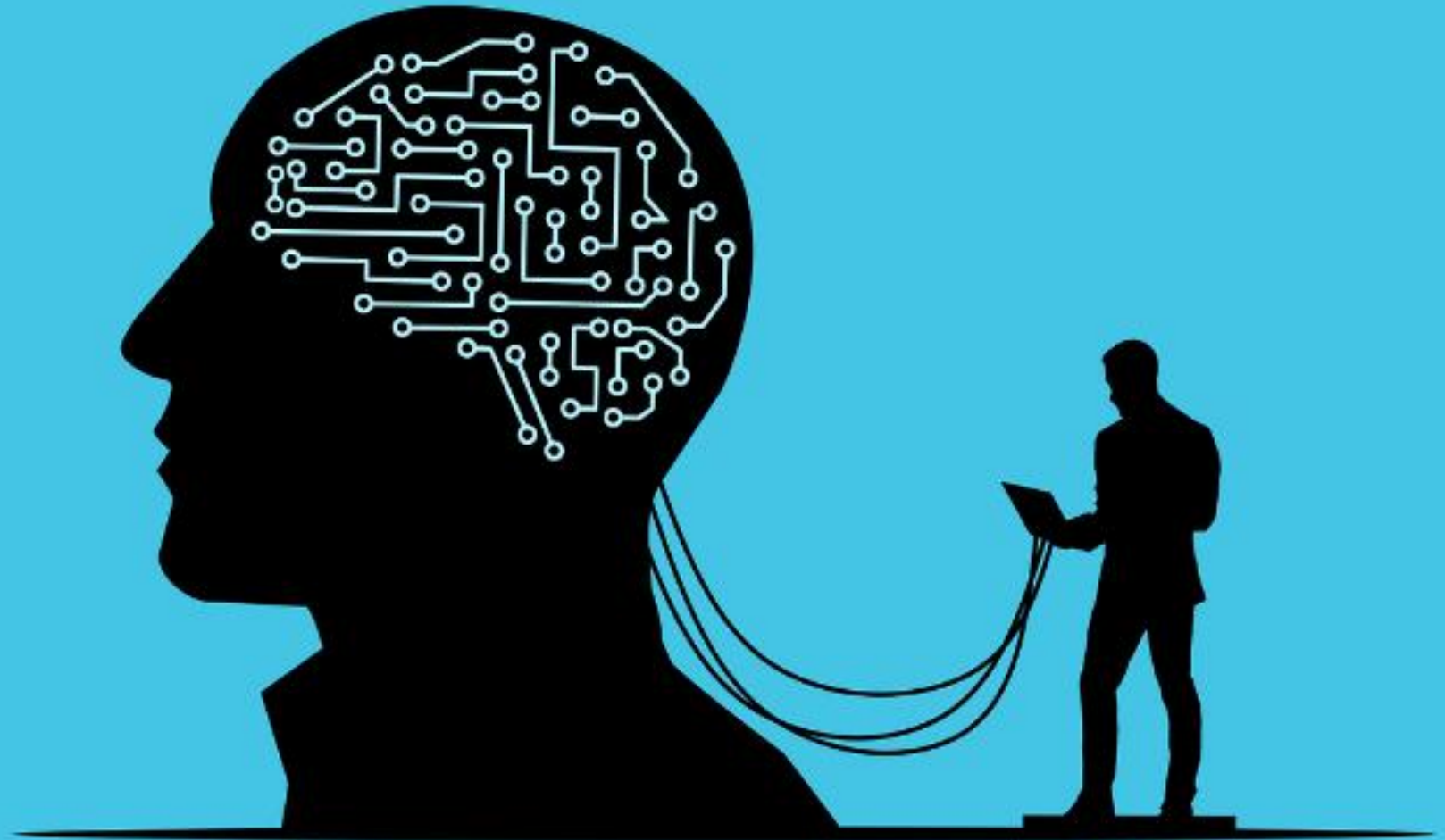
Publicity

Art. 20 (3) BL

Material protection of
fundamental rights

e.g. Art. 14 (1), Art. 6 BL

13. Use of Artificial Intelligence in Judicial Decision-Making (1)



13. Use of Artificial Intelligence in Judicial Decision-Making (2)

MAKI = „Massenverfahrens-Assistenz
mithilfe von KI“

An AI-enabled Assistant for Mass Proceedings

- Research Scope
 - Legal and technical framework for the use of artificial intelligence in judicial decision-making
 - Ensuring acceptance and legal conformity of the planned procedure
- Research Questions
 - Identification of the legal and technical limits of the use of AI in judicial decision-making („drawing the red line“)
 - Prepare Recommendations for the use of AI in judicial decision-making (best practices, gold standard)

13. Use of Artificial Intelligence in Judicial Decision-Making (3)

MAKI



?



13. Use of Artificial Intelligence in Judicial Decision-Making (4)

■ Research Approach: Analysis According to Use Scenarios

Substituting judicial decisions by AI

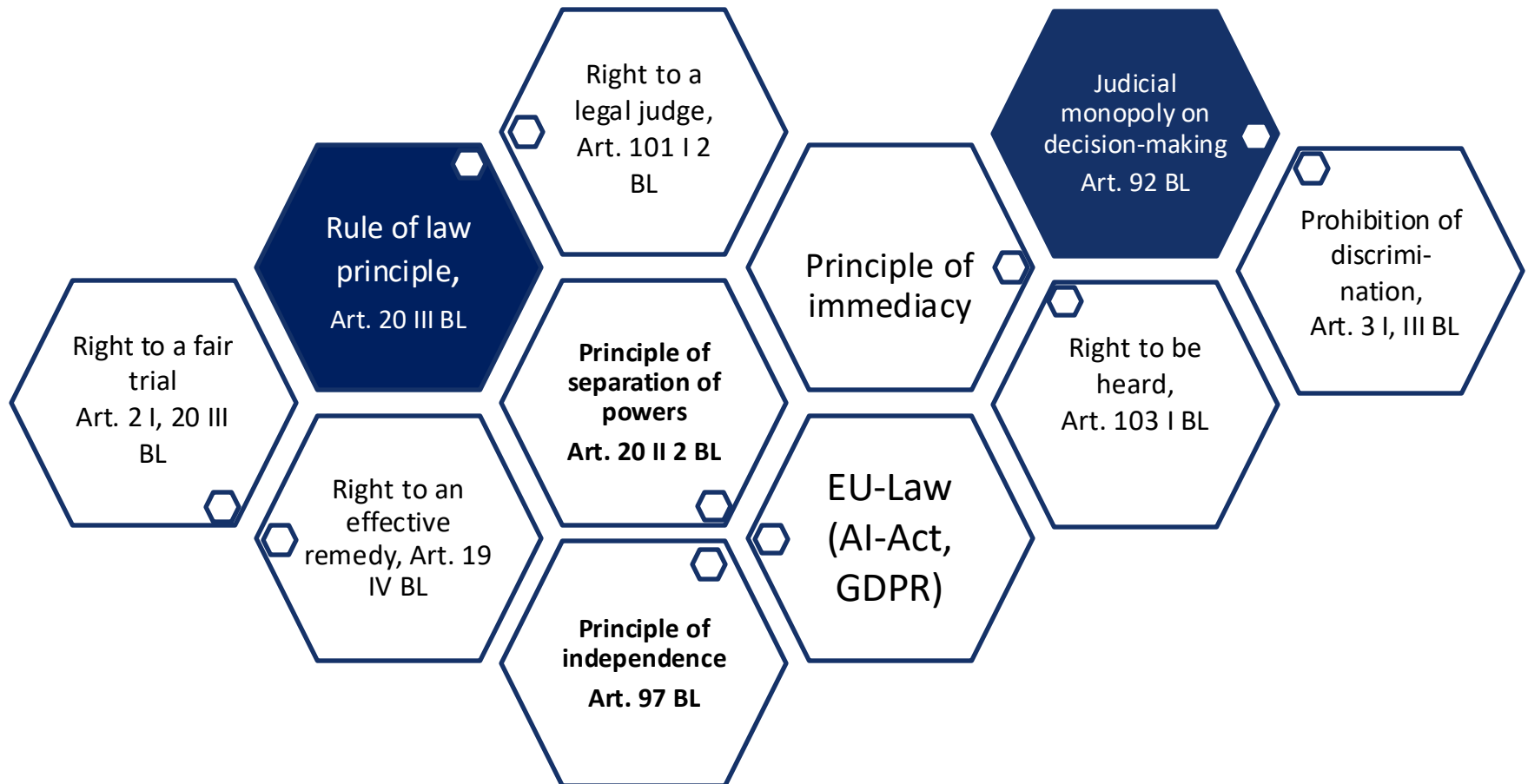
- „Robo-Judge“
- „Instance Zero“
- Mass Proceedings

Supporting judicial decisions by AI

- Metadata and information extraction
- Automatic keywording and indexing
- Search engines and research
- Text editing and relation
- Pattern recognition and classification
- Text block and text generation
- Dialogue systems
- Anonymisation
- Speech and image recognition

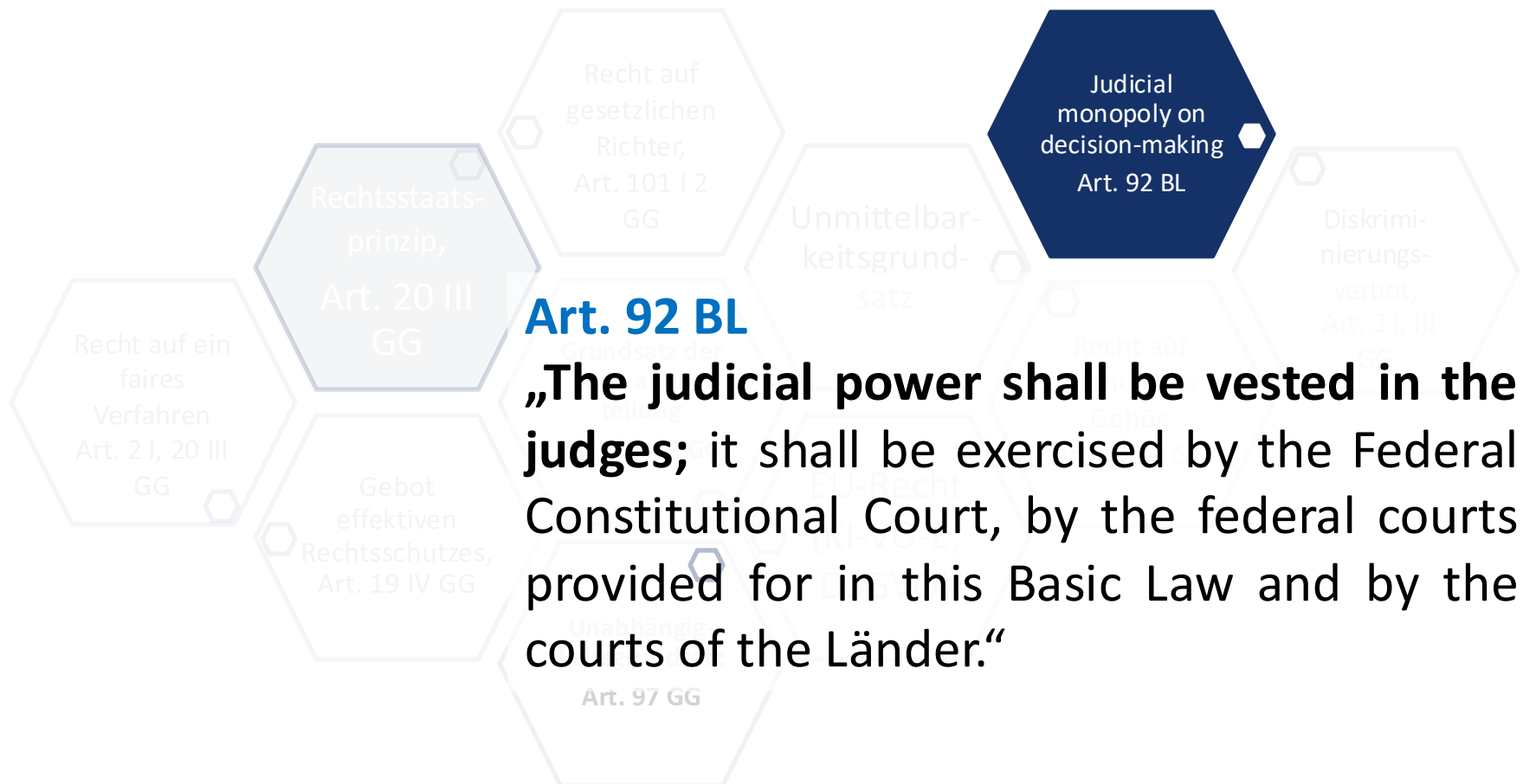
13. Use of Artificial Intelligence in Judicial Decision-Making (5)

- Legal research questions



13. Use of Artificial Intelligence in Judicial Decision-Making (6)

- Legal research questions



13. Use of Artificial Intelligence in Judicial Decision-Making (7)

■ Scope

- Function
- Conceptions of the following expressions crucial for material scope of the guarantee
 - “judicial power “
 - „judges “

■ Conclusions for the use of information technology systems

- Expression „**judicial power**“ **only partly open to the disposition of the lawmaker**
 - If activities fall within this expression, high requirements of Art. 92 BL have to be met
- **Requirement of a human judge cannot be derived from Art. 92 BL (deviating domin. opinion)**
 - **De facto (in most scenarios):** human judge required due to the constitutional qualification characteristics and only limited capabilities of information technology systems!
 - Benchmark-Test: system must *be able to solve a case (even an unfamiliar one) appropriately and on the basis of the applicable law*
 - **Exception:** fact-poor cases that only raise simple legal questions without any scope for legal or factual evaluation.
 - Situation that is equivalent to a mathematical-logical, arithmetical operation with variables known to the system; e.g. claim für compensation for denied boarding according to Art. 4 (3) EU Passenger Rights Regulation
 - already too difficult: claim for compensation for flight cancellation according to Art. 5 (1) lit. c, Art. 7 (1) EU Passenger Rights Regulation („extraordinary circumstances “)

13. Use of Artificial Intelligence in Judicial Decision-Making (8)

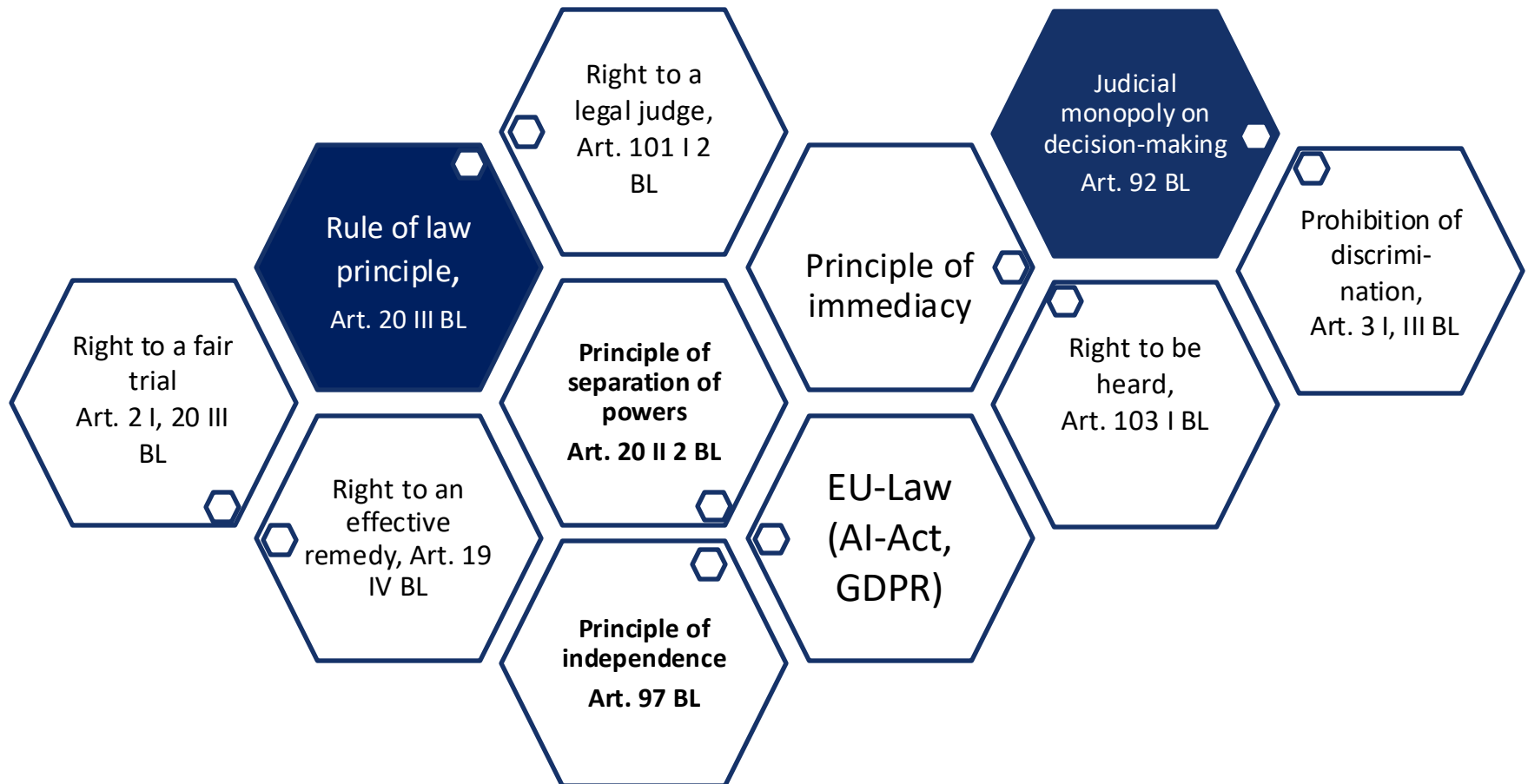
- Use of information technology systems instead of a judge (**decision-replacing use**)
 - Possible legislative approaches:
 1. Procedure without ultimate binding effect („judicial power“ element)
 - Proceeding that leads to a legal title with AI-supported examination (with legal effect)
 - lack of ultimate binding effect, e.g. by enabling a possible entrance into ordinary court proceedings (even after issuance of the automated decision within a specific time period)
 - see German small claims procedure (Mahnverfahren), where strict requirements of Art. 92 BL do not apply
 2. Additional automated „Instance Zero“
 - only possible in exceptional circumstances (s. above)
 - Strict requirements of Art. 92 BL must be met.
 - Relatively limited scenarios for decision-replacing use that meet high development costs(!)
- Use of information technology systems to support the judge (**decision-supporting use**)
 - In line with Art. 92 BL as long as strict requirements are met
 - Examination of use scenarios necessary

13. Use of Artificial Intelligence in Judicial Decision-Making (9)

- Use scenarios **outside the scope of Art. 92 BL** (mere administrative tasks)
 - Metadata and information extraction
 - Anonymisation
- Use scenarios **within the scope of Art. 92 BL**
 - Tasks preparing the judicial decision and requiring some sort of legal expertise
 - Information extraction:
 - Automatic keywording and indexing
 - Search engines and research
 - Text editing and relation
 - Pattern recognition and classification
 - Text block and text generation
 - Dialogue systems
 - Speech and image recognition
 - **Consequence:** Final decision-making and control by human judge in most cases necessary

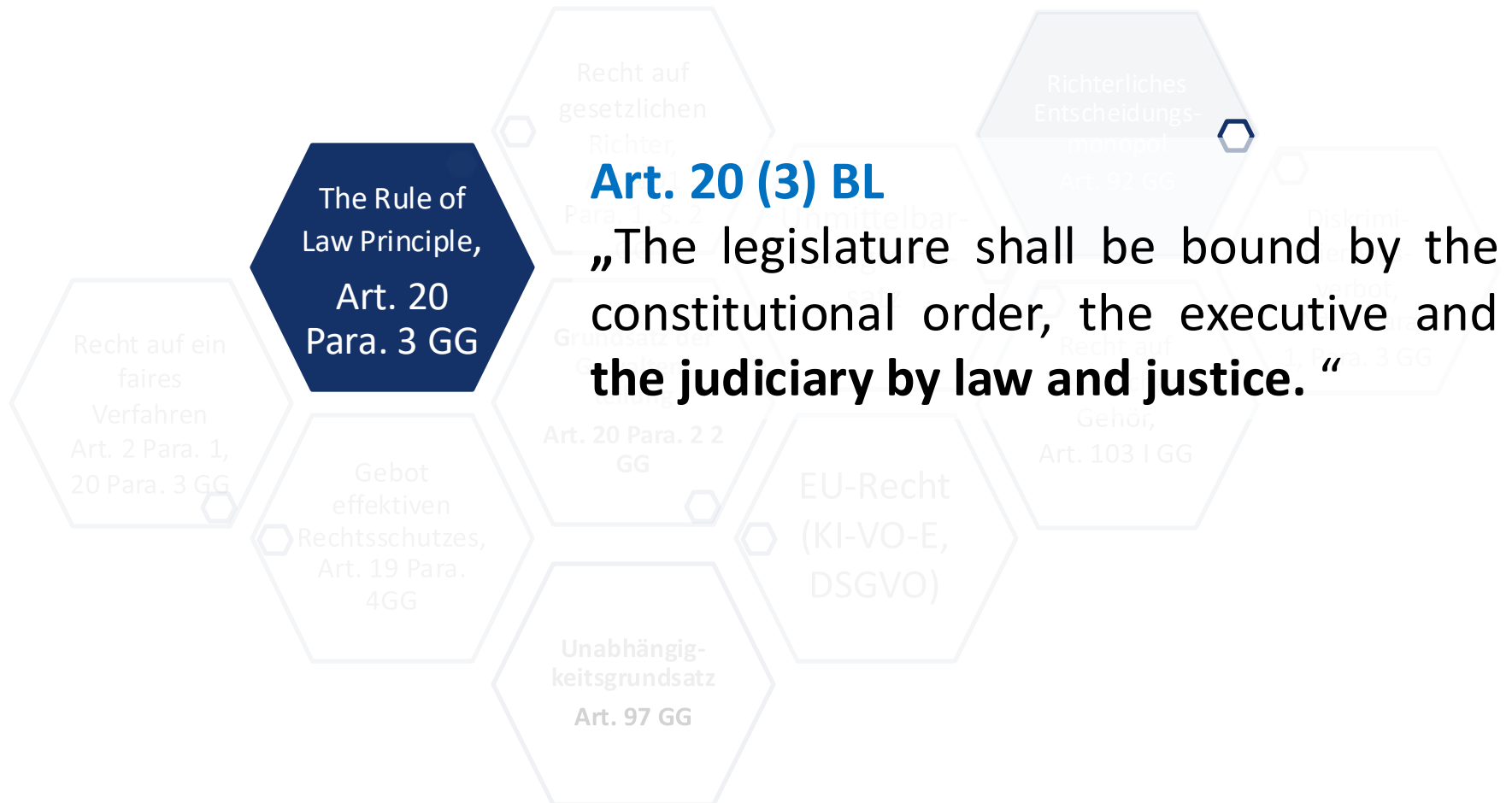
13. Use of Artificial Intelligence in Judicial Decision-Making (10)

- Legal research questions



13. Use of Artificial Intelligence in Judicial Decision-Making (11)

- Legal research questions



13. Use of Artificial Intelligence in Judicial Decision-Making (12)

- The Rule of Law Principle requires reasoning of judicial decisions: judicial decisions must be based on a comprehensible reasoning
 - Relevant Criteria:
 - Methodical plausibility
 - Relevant aspects in the decision-making process
- Multiple purposes of this requirement
 - External control by addressees and society
 - Self-control by decision-maker
 - Transparency and Comprehensibility of state action
 - Among others: promotion of acceptance; reliability, predictability, commitment to the constitutional order,
 - Independent significance within the framework of the rule of law principle

13. Use of Artificial Intelligence in Judicial Decision-Making (13)

- Conclusions for the use of AI systems in judicial decision making
 - Justification, transparency and comprehensibility requirements also apply to the use of AI systems
 - „Black Box“-problem
 - Justification requirement demands the disclosure of the basis for decision-making
 - Legal basis
 - Factual basis
 - Assessment of evidence
 - Basis for decision-making must be stated accordingly in the reasoning
 - Transparency and Comprehensibility also require:
 - Information on the use of AI in the process of decision-making
 - Information on the type of system and method (generalized)
 - Information on training data and method (generalized)
 - Not necessarily information on the source code as there is no benefit for most citizens

Summary

- Constitutional Foundations
- Use of Artificial Intelligence in Judicial Decision-Making