



# **WHO-WIPO-WTO Technical Workshop on Patentability Criteria Geneva, 27 October 2015**

## **The TRIPS Agreement and Patentability Criteria**

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## **Trilateral Cooperation: To Build Capacity, To Ensure Coherence**

- **Essentially among WHO, WIPO, WTO**
- **“Traditional” fields of cooperation, in particular capacity building activities**
- **Series of joint technical symposia**
- **WHO/WIPO/WTO study on “Promoting Access and Medical Innovation: Intersections Between Public Health, IP and Trade”:**
  - **Aims at assisting decision-makers by providing information and data**
  - **Illustrates the need to adopt a holistic approach**

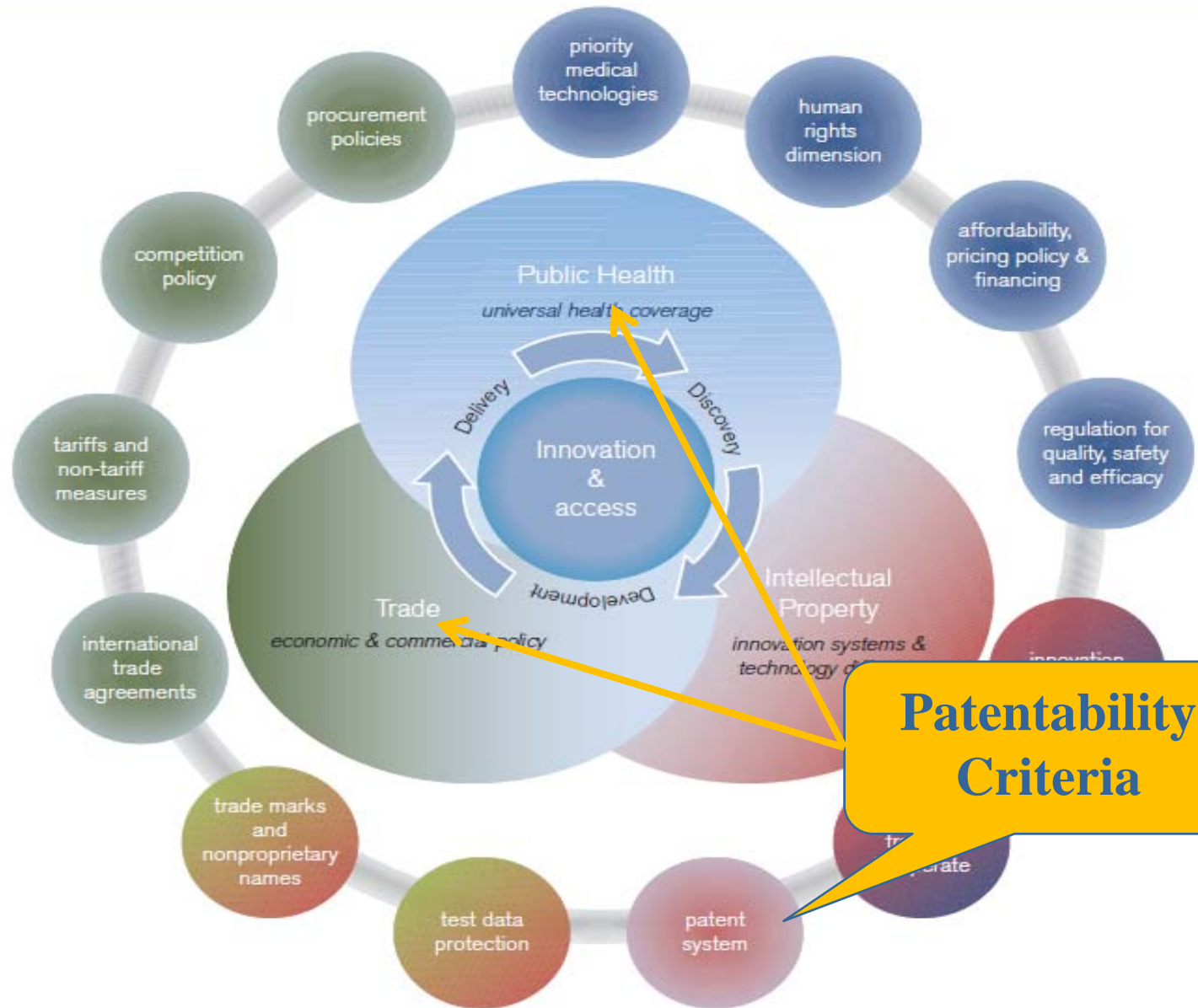


## WTO's Role

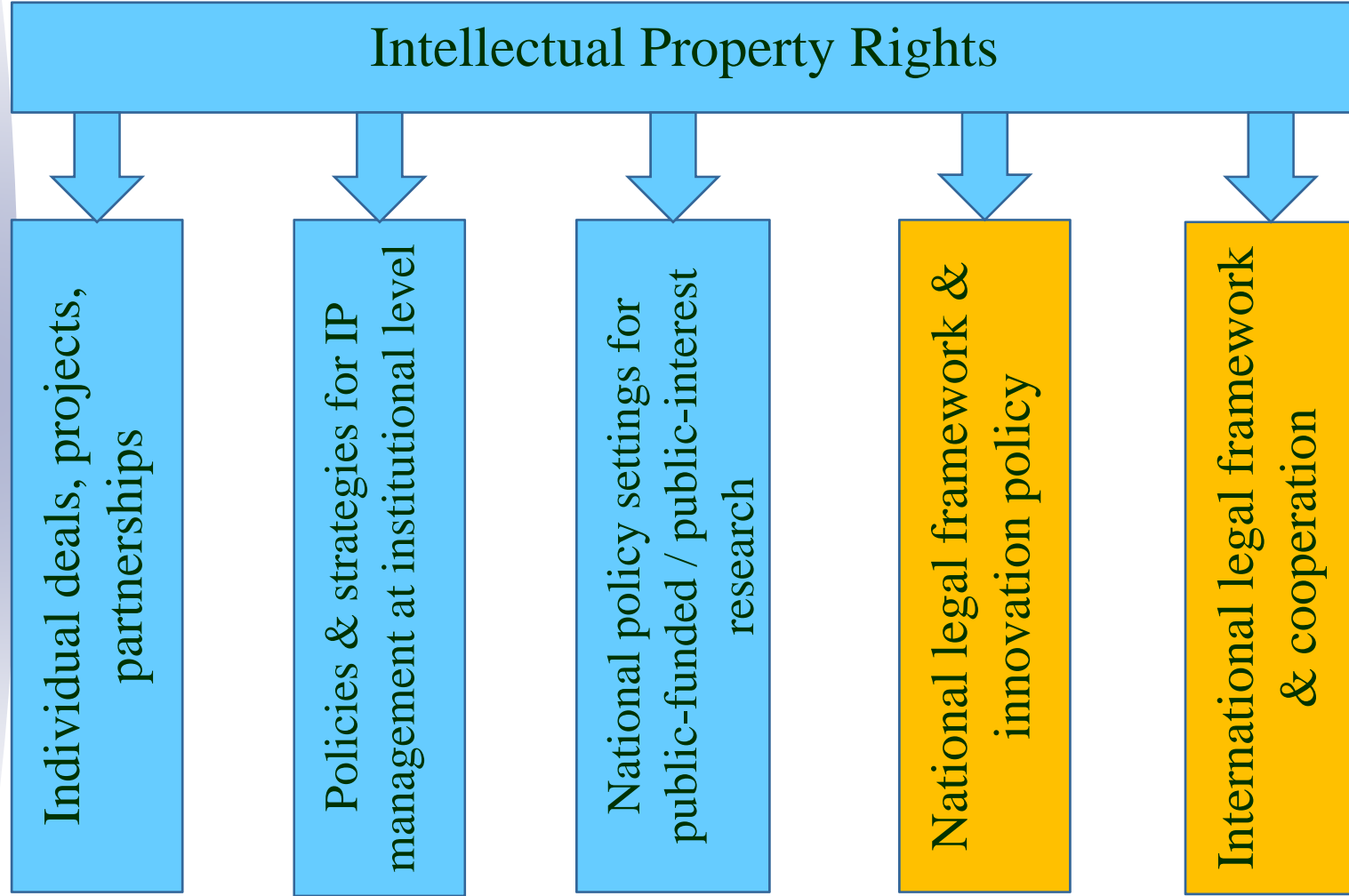
- Making available a forum for debate
- Raising awareness through workshops
  - Example: Workshop on Trade and Public Health (since November 2014)
- Providing factual / technical information
- Facilitating informed decision-making
- Solving disputes
- **The WTO's mandate is NOT**
  - to interpret provisions of any of the WTO agreements, including the TRIPS Agreement
  - to assess implementation/use

# Intersections between health, IP and trade

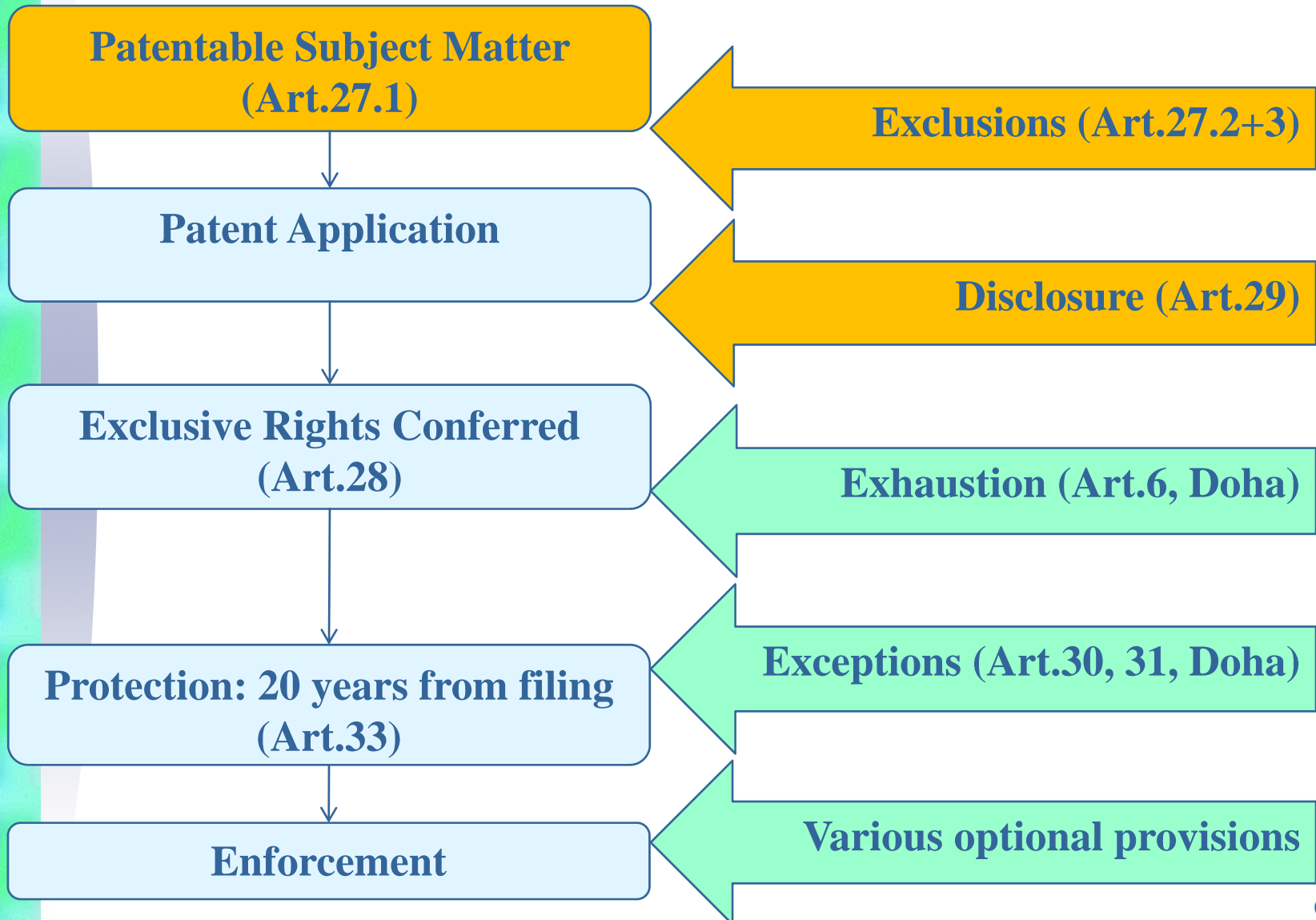
Mapping the policy intersections: key areas of law and policy for innovation and access



# Interaction IPRs - public health



# Patents: Search for A Balanced Approach





# **TRIPS: Cumulative Application of Five Patentability Criteria**

- **Patentable subject matter**
- **Novelty**
- **Inventive step or non-obviousness**
- **Industrial applicability**
- **Disclosure of the invention**

## What TRIPS Says and Does Not Say (1)

- **Article 27 covers “patentable subject matter”**
- **Article 27.1, 1<sup>st</sup> sentence makes availability of patents mandatory for:**
  - Inventions: regarding both products and processes
  - In all fields of technology
  - Which are new, involve an inventive step and are capable of industrial application
- **Inherent flexibility (footnote 5 to Art.27):**
  - Inventive step = non-obvious
  - Capable of industrial application = useful
- **In addition - key terms not defined:**
  - What constitutes an “invention”
  - When is an invention new, inventive and capable of industrial application
  - No guidance by Paris Convention





## What TRIPS Says and Does Not Say (2)

- **Article 27.1, 2<sup>nd</sup> sentence: no discrimination as to place of invention, field of technology and whether products are imported/locally produced:**
  - WTO jurisprudence on non-discrimination principle in DS114 (Canada – Protection of Pharmaceutical Products)
  - Rejects de jure and de facto discrimination of regulatory review exception - concentration of effects on pharmaceutical industry is no sufficient evidence of discriminatory purpose
- **Disclosure requirement under Art.29:**
  - Limited guidance as to what and how to disclose
  - Optional: best mode and information regarding foreign applications and grants
  - Silent with respect to disclosure of genetic resource or traditional knowledge
- **Note: LDCs currently exempted from TRIPS obligations, except for national treatment and MFN**

# Optional Exclusions

- Available even when substantive and formal conditions for patents are met
- Art.27.2 and 3 TRIPS contain exhaustive list of three possible grounds for exclusion:
  - Protection of *ordre public* (i.e. general security, core values of society) or morality, provided that prevention of commercial exploitation is necessary to do so
  - Methods of treatment - does not extend to related medical devices
  - Plants, animals and essentially biological processes for their production
- Flexible framework: inherent recognition of different societal and ethical values

## Patentability: Selected Key Issues (1)

- **Material existing in nature**
  - Patentability of biotechnological inventions is subject to longstanding and ongoing debate
  - See Proposal in TRIPS Council review of Art.27.3(b) to exclude patents on life forms
  - Examples from WTO Members:
    - EU Directive 98/44/EC and CJEU jurisprudence
    - recent jurisprudence in the US (Myriad; Mayo)
- **First and second medical indications**
  - Patentability not addressed by TRIPS
  - Countries take different approaches, e.g.:
    - Excluded by Andean Community Decision 486
    - Permitted under EPC
  - Typical example for debate on access and incentives to innovate

## Patentability: Selected Key Issues (2)

- **Incremental and adaptive innovation**
  - **Examples:**
    - new dosage forms increasing compliance / improving efficacy
    - new formulations with improved storage characteristics
    - new forms of delivery
  - **Concerns voiced: patenting delays access to medicines and innovation**
  - **Challenge: distinguish between innovations that confers real improvements and those that do not offer any therapeutic benefits**
- **Disclosure:**
  - **Proposal to amend TRIPS to require the disclosure of the country providing/source of genetic resources, and/or associated traditional knowledge in patent applications (TN/C/W/52 of July 2008)**

# Issues Raised in Recent TPR Reviews (1)

- **Patentable subject matter**
  - **Human gene sequence / biological material**
    - Human gene sequence extracted and/or isolated from its natural environment / synthetic DNA is patentable, provided a practical use is disclosed for the sequence (Australia, 2015)
    - Mere discovery of living material directly isolated from nature does not constitute patentable invention, but applications for processes of isolation can be considered (India, 2015)
    - No patents for plants and animals other than micro-organisms (India, 2015)
  - **Traditional knowledge (TK)**
    - Technical invention based on or developed using TK may be protected by patents provided that patentability requirements are satisfied (Hong Kong, China, 2014)
    - Substantive patentability criteria apply to patent applications being developed from Australian genetic resources and TK; submissions from third parties and third countries can be considered (Australia, 2015)
  - **Second medical use claims**
    - Not considered to be patentable products or processes (Viet Nam, 2013)

## Issues Raised in Recent TPR Reviews (2)

- **Patentability criteria in general**
  - Interpretation
    - No move towards more liberal interpretation that could explain increase in patent grants (Japan, 2013)
  - In FTAs
    - No patentability of modifications and new uses of pharmaceutical inventions sought in FTAs concluded with developing countries (EU, 2013)
- **Inventive step/obviousness**
  - “Enhanced therapeutic efficacy” in Section 3(d) Patent Act does not introduce additional patentability criterion, but implies inventive step and applies to all fields of technology (India, 2015)
  - Raising the Bar Act of 2012 removes restrictions on information and background knowledge taken into account in assessing inventiveness (Australia, 2015)

## Issues Raised in Recent TPR Reviews (3)

- **Industrial applicability/usefulness**
  - No intention to amend Patent Law to reflect “promised utility” doctrine in jurisprudence - courts seek to protect patent system against patent applications based on speculation (Canada, 2015)
  - To raise patent quality, 2012 Act bolsters usefulness requirement: invention to work as indicated by patent and explanation how it works (Australia, 2015)
- **Disclosure**
  - No measures envisaged to relieve applicant`s disclosure obligation; to ensure that inventors do not “hide” relevant prior art (US, 2014)
  - High standards for disclosure to ensure granted patents are not broader than disclosed inventions (Australia, 2015)
- **Collaboration**
  - With SIPO to support substantive examination of patentability criteria (Hong Kong, China, 2014)

# Issues Raised in WTO Accession Negotiations

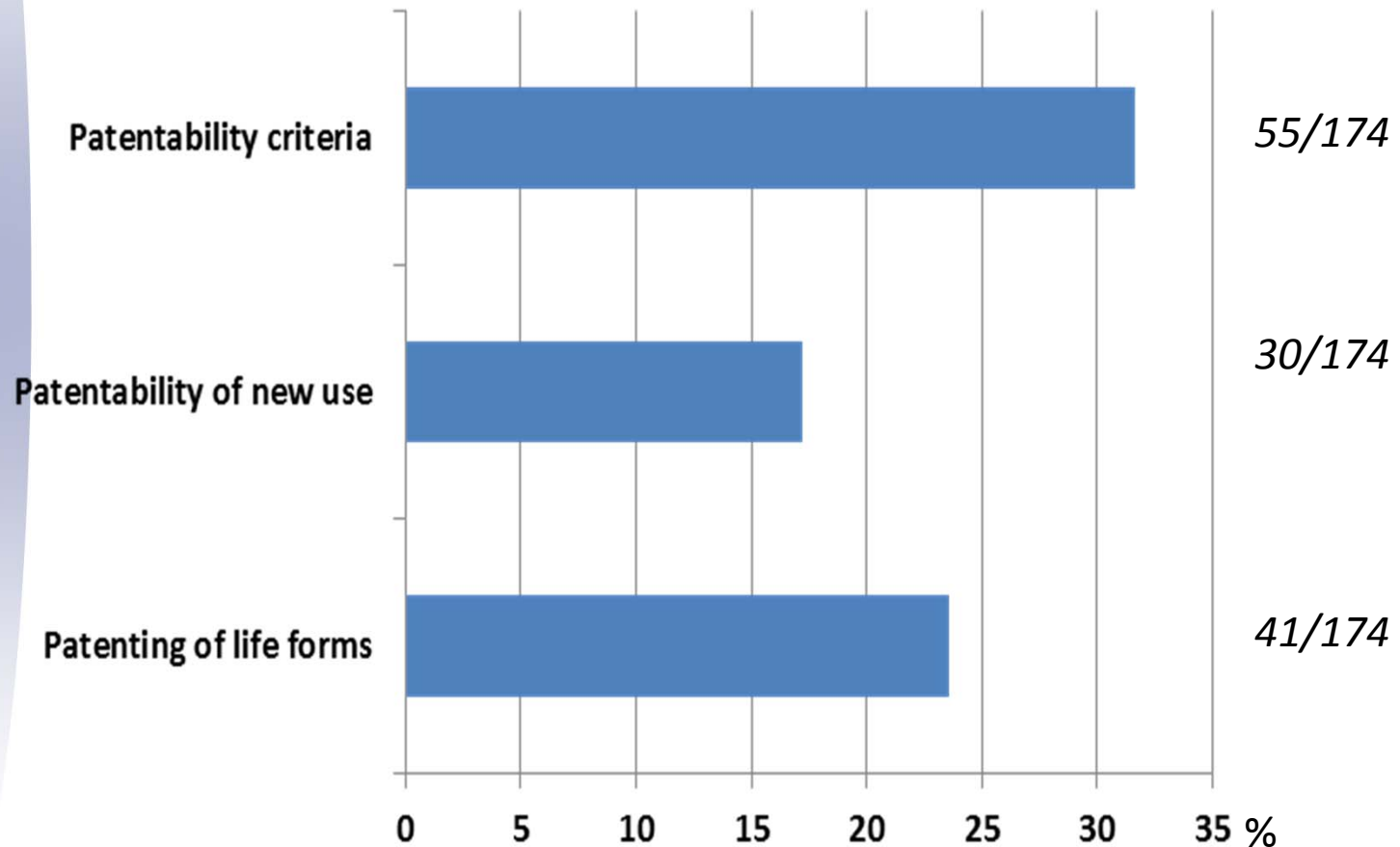
- **Exclusions from patentability:**
  - Inventions violating *social interests* or humanitarian and moral principles: confirmation that Art.1349 of Russia's Civil Code would be interpreted and applied in compliance with Art.27.2 and 27.3 TRIPS (Russian Federation, WP Report of Nov. 2011)
  - Inventions contrary to public interest, humanitarian principles and morality: confirmation of law amendment to replace terms by reference to *ordre public* and morality (Kazakhstan, WP Report of June 2015)
  - Micro-organisms and non-biological processes: patentability clarified in new Law on Patents (Saudi Arabia, WP Report of November 2011)



# Extracts from Country Reports 2015

- **Brazil**
  - Under way: Law Bill 5.402/2013 in Congress to implement TRIPS flexibilities
  - Proposed measures include stricter patentability criteria and explicit prohibition to grant patents for second uses
- **Seychelles**
  - Recommendation to restrict patentability of new uses and new indications under consideration
- **Trinidad and Tobago**
  - Possibility of patenting plants and animals
  - But: exclusions regarding discoveries effectively limit patentability to new varieties that can only be obtained by transgenic engineering and not by naturally occurring breeding

# Patentability Provisions In Trade Agreements With IP Provisions (Notified to the WTO By Feb.2014)





# Patentability Criteria in Trade Agreements: Selected Examples

- **TPP - see leaked text of October 2015**
  - Provision on patentable subject matter based on Art.27.1, and exclusions in Art.27.2 and 3 TRIPS
  - Confirms that patents are to be made available for inventions claimed as at least one of the following: new uses of a known product, new methods of using a known product, or new processes of using a known product; optional limitation of such processes to those that do not claim the use of the product as such
  - Confirms availability of patents for inventions derived from plants
- **TTIP – EU position paper of March 2015**
  - IPR chapter could recall “established practices on patent procedures and patentability criteria, including regarding secondary use or incremental innovation; ...”

## Conclusions

- **Key terms not defined in TRIPS:**
  - Considerable policy space left to patent offices and courts to interpret and apply patentability criteria at national/regional level
  - Allows for sector-specific considerations to be built into decisions on patentability
- **Results in considerable divergence in implementation at country level:**
  - patentability of new use or method of using existing product treated differently
  - varying landscape of patents for the same product: granted / rejected at country level
- **Comprehensive, holistic reflection needed:**
  - At country level: how can patentability criteria best assist in achieving policy objectives – need to define and to ensure implementation
  - In general: preserve TRIPS as is or need to harmonize further?