Call for nominations of experts for the assessment of invasive alien species for Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)

As per the circular letter from Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), this ministry has to nominate candidates for the assessment of invasive alien species.

Interested Nepalese Professionals/experts having following competencies are encouraged to apply. Nominees having expertise related to the themes and skills required for the chapters of the assessment as set out in its scoping document (available https://www.ipbes.net/system/tdf/ipbes-6-inf-10_en.pdf?file=1&type=node&id=16523). Experts on invasive alien species within one or more of the following disciplines: natural sciences; social sciences; or the humanities; be indigenous and local knowledge experts or have expertise in indigenous and interdisciplinary and/or international contexts.

Nominees are invited to fill out the application form and attach their curriculum vitae through the dedicated web portal (www.ipbes.net) (To access this page, you will need to log in with your IPBES web site login credentials or Nominees not yet registered on the IPBES web site will need to do so by clicking on the "Create new account".)

Interested experts (Nominees) are requested to fill out their application form by no later than 11 January 2019.

More information on the work of experts and on financial support available to selected experts can be found https://www.ipbes.net/sites/default/files/Guidance_on_IPBES_assessments_for_newly_nominated_experts_20180420_final.pdf
Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services

Plenary of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
Sixth session
Medellin, Colombia, 18–24 March 2018
Item 8 of the provisional agenda*

Pending assessments: thematic assessment of the sustainable use of wild species; methodological assessment regarding the diverse conceptualization of multiple values of nature and its benefits; and thematic assessment of invasive alien species

Information on scoping for a thematic assessment of invasive alien species and their control (deliverable 3 (b) (ii))

Note by the secretariat

1. In paragraph 3 of section IV of decision IPBES-4/1, the Plenary of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) approved the scoping report for a thematic assessment of invasive alien species and their control, set out in annex III to the decision. In paragraph 5 of decision IPBES-5/6, on financial and budgetary arrangements, the Plenary decided to consider at its sixth session, subject to the availability of sufficient funds, the pending thematic assessment of the sustainable use of wild species, the pending methodological assessment regarding the diverse conceptualization of multiple values of nature and its benefits and the pending thematic assessment of invasive alien species.

2. At its sixth session, the Plenary will therefore be invited to consider the undertaking of the assessment of invasive alien species based on the approved scoping report, which is reproduced in the annex to the present note, without formal editing. Section VI of the scoping report, on process and timetable, and section VII, on cost estimate, have been revised to take into account information set out in the note by the secretariat on considerations pertaining to the pending assessments, including a suggested revised process, timeline and budget (IPBES/6/8).

* IPBES/6/1.
Annex

I. Scope, rationale, utility and assumptions

A. Scope

1. The objective of the proposed thematic assessment of invasive alien species and their control is to assess the array of such species that affect biodiversity and ecosystem services; the extent of the threat posed by such species to various categories of biodiversity and ecosystem services, including impacts on agrobiodiversity and food, human health and livelihood security; the major pathways for and drivers of the introduction and spread of such species between and within countries; the global status of and trends in the impacts of such species and associated management interventions by region and subregion, taking into account various knowledge and value systems; the level of awareness of the extent of invasive alien species and their impacts; and the effectiveness of current international, national and subnational control measures and associated policy options that could be employed to prevent, eradicate and control invasive alien species. Emphasis should be placed on response options.

2. For purposes of the assessment, invasive alien species are defined as animals, plants or other organisms introduced directly or indirectly by people into places out of their natural range of distribution, where they have become established and dispersed, generating an impact on local ecosystems and species.

3. The assessment will focus on species fitting this definition, especially those with a demonstrable impact on or risk for biodiversity and, through their effects on ecosystem services, human well-being. In addition, however, for the assessment to be most useful for policy formulation it should assess not only the current impacts of invasive alien species, but also sources of emerging risk. The assessment should also recognize that invasive alien species do not constitute a purely passive phenomenon. Most of the movement of species is human mediated or human driven, e.g., through trade. Lastly, the assessment could suggest prevention and management strategies that are sensitive to the fact that many alien species may be both problematic and useful. Furthermore, some species will be manageable, but others will be intractable and need to be recognized as such. Responses, including strategies for prevention and adaptive management, will therefore need to be flexible and pragmatic.

B. Geographic coverage of the assessment

4. The assessment will be global, encompassing invasive alien species in terrestrial, freshwater and marine ecosystems.

C. Rationale

5. The proposed assessment responds directly to Aichi Biodiversity Target 9: “By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment”, as contained in the Strategic Plan for Biodiversity 2011–2020. It also contributes directly to Sustainable Development Goal 15, target 15.8, of the 2030 Agenda for Sustainable Development: “By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species” (https://sustainabledevelopment.un.org/post2015/transformingourworld). Lastly, it will also contribute to the achievement of Aichi Biodiversity Targets 5, 11, 12 and 17 and help to determine priorities for prevention and management under these targets. Invasive alien species are acknowledged as major drivers of species extinctions globally; they degrade habitats and have serious impacts on protected areas around the world.

6. Invasive alien species constitute one of the most serious and rapidly growing threats to biodiversity, ecosystem services and food, health and livelihood security. Invasive alien species often show newly evolved traits, such as increased competitive and dispersal abilities in new habitats. For many countries, invasive alien species are seen as a more serious threat than climate change. Such species have been responsible for the extinction of native plants and animals, degradation of rare and threatened ecosystems and ecological communities, crop failure and declining agricultural productivity, loss of cultivar and animal breed diversity and damage to property, infrastructure, native fisheries, tourism and outdoor recreation. The threats to native biodiversity from marine invasive alien species are acknowledged as major drivers of species extinctions globally; they degrade habitats and have serious impacts on protected areas around the world.

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1 Decision X/2 of the Conference of the Parties to the Convention on Biological Diversity, annex. Available at www.cbd.int/sp/targets.
species, either from deliberate or accidental introductions (e.g., in contaminated ballast water or as encrusting organisms on ships), are increasingly serious and very poorly understood.

7. A large proportion of globally and locally threatened species and ecosystems are at risk from invasive alien species. Habitat loss remains the primary threat to most species, but the impact of invasive alien species is an additional significant threat. The impacts on oceanic islands are serious, with a majority of all extinctions of mammals, birds, amphibians, reptiles, land crabs, land snails and insects being directly or indirectly the result of invasive alien species. They also have a significant impact on economies: worldwide, for example, it has been estimated that the cost of damage from such species in 2001 exceeded $1.4 trillion, amounting to 5 per cent of the global economy.\(^2\) The use of pesticides to control invasive alien species is also a major cause of the loss of biodiversity and represents a threat to human health. Similarly, invasive alien species may introduce pathogens leading to significant public and agricultural health burden and associated disease treatment and control cost.

D. Utility

8. The rapidly growing threat that invasive alien species pose to biodiversity, ecosystem services, sustainable development and human well-being is generally poorly quantified and understood by decision makers. The proposed assessment would raise awareness of the nature and seriousness of the threat posed by such species and identify policies that could be used at the international level and by Governments, the private sector and civil society to prevent the spread of, eradicate or control the impact of invasive alien species. This assessment would highlight how the Platform can add value to policy formulation to address the biodiversity crisis.

9. The assessment will aim to address, inter alia, questions of relevance to decision makers dealing with invasive alien species, such as:

(a) What progress has been made in tackling the Aichi Biodiversity Targets of relevance to invasive alien species globally?

(b) What global-level policy initiatives would assist in invasive alien species prevention and management?

(c) What are the obstacles to the uptake of invasive alien species prevention and management measures?

(d) What methods are available for prioritizing invasive alien species threats?

(e) How can networks assist in the prevention and management of invasive alien species?

What role can regional partnerships play?

(f) Are there perverse policy drivers that unintentionally create risks in relation to invasive alien species?

(g) How can decision makers decide which issues to tackle first given limited resources?

(h) Would there be value in developing a database of effective legislation, monitoring and response systems for invasive alien species, and of those countries and other stakeholders in need of capacity-building?

(i) What are the impacts, risks and benefits of invasive alien species for biodiversity and ecosystem services, sustainable development and human well-being?

(j) How might policy sectors, businesses, non-governmental organizations and other stakeholders benefit from better prevention and management of invasive alien species?

(k) How does one prevent and manage invasive alien species that cause harm to biodiversity but contribute to economic activities?

E. Assumptions

10. The proposed assessment will be based on existing assessments, scientific literature, grey literature and indigenous and local knowledge and will draw on the work of existing institutions and networks (see section IV on relevant stakeholders). The assessment team will be able to draw upon a list of references of published and grey literature, along with comments assembled during the conference scoping process. Levels of confidence, as outlined in the Platform’s guide for

assessments, will be assigned to all findings. The assessment expert group will be diverse in terms of skills, gender and global coverage.

11. The assessment expert group will consist of 2 co-chairs, 52 authors and 12 review editors, who will be selected in accordance with the procedures for the preparation of the Platform’s deliverables following a call for nominations after approval of the scoping report by the Plenary. The assessment expert group will be supported by a technical support unit (comprising one full-time equivalent Professional staff member).

12. As requested by the Plenary at its third session, the Multidisciplinary Expert Panel, in consultation with the Bureau, has developed a coordinated approach for regional and subregional assessments and thematic assessments. In accordance with this approach, ten authors with expertise in invasive alien species have been embedded in each of the expert groups for the four regional assessments approved by the Plenary at its third session. These 40 experts are to contribute both to the regional assessments and, by virtual means, to the thematic assessment of invasive alien species. In addition, two of these ten experts from each of the regional assessments will be fully integrated, as lead authors, in the expert group for the invasive alien species assessment in order to ensure full coherence among all the assessments with regard to work on such species.

II. Chapter outline

13. The thematic assessment report will be a policy-relevant six-chapter report, as set out below.

14. Chapter 1 will be an introduction to the assessment. It will introduce the concept of invasive alien species. It will include terminology and definitions; the risks posed by such species to marine, freshwater and terrestrial ecosystems; information on invasive alien species in the context of the Platform’s conceptual framework; and a brief overview of the importance of understanding perceptions of invasive alien species in the context of different value systems. The chapter provides a roadmap to the assessment.

15. Chapter 2 will provide an analysis and synthesis of previously completed invasive alien species assessments, the Platform’s regional assessments, the scientific and grey literature and information from indigenous and local knowledge systems. The chapter should provide a synthesis of past and future trends in the spread, pathways, evolutionary change and distribution of invasive alien species and identify gaps in existing knowledge.

16. Chapter 3 will provide an analysis and synthesis of direct and indirect drivers responsible for, inter alia, the introduction, spread, abundance and dynamics of invasive alien species from previous assessments, Platform regional assessments, the scientific and grey literature and information from indigenous and local knowledge systems.

17. Chapter 4 will provide a global and overall analysis and synthesis of the environmental, economic and social impact of invasive alien species from previous assessments, including the Platform’s regional and subregional assessments, the scientific and grey literature and information from indigenous and local knowledge systems. The chapter will focus on the impact of invasive alien species on nature and nature’s benefits to people and a good quality of life, as defined in the conceptual framework, including non-economic values, e.g., cultural, social and shared, recreational, scientific, spiritual and aesthetic values.

18. Chapter 5 will review the effectiveness of past and current programmes and tools for the global, national and local prevention and management of invasive alien species and their impacts. In particular, the chapter will consider and assess past experience with:

(a) Preventing the international and intranational spread of invasive alien species, including the role of trade and economic development;

(b) The precautionary approach in preventing and managing invasive alien species and the efficacy of risk assessment as a tool for managing such species;

(c) National quarantine measures and the adoption of biosecurity approaches;

(d) Managing complexity and intersectoral conflict, e.g., introduced species that are useful or harmful, depending on context and values;

3 The undertaking of four regional assessments was approved by the Plenary in decision IPBES-3/1, section III, paragraph 1.
(e) Uses of social media and citizen science for the detection, prevention and management of invasive alien species outbreaks;

(f) Eradicating or managing invasive alien species once they are present, including control options such as precision application of pesticides, baits and biological control, depleting populations of such species through use and exploitation and other practices such as “gene drive” technology. Methods for the ethical control of invasive animals will be documented;

(g) Capacities of different countries to manage invasive alien species, and barriers to the uptake of tools; and

(h) Managing invasive alien species in protected areas, including wetlands designated as significant under the Convention on Wetlands of International Importance, especially as Waterforwl Habitat, and biosphere reserves;

(i) Managing biological communities in which invasive alien species are present, considering co-existence, including direct and indirect interspecific interactions.

19. Chapter 6 will explore future options for the prevention and management of invasive alien species and provide an analysis of possible support tools for decision makers, such as the categorization and classification of invasive alien species according to the type and magnitude of their impact, as well as an analysis of their costs and benefits, in order to support decision-making about prevention and management and control options regarding invasive alien species. The chapter will present options for global awareness-raising, for creating early warning systems, for capacity-building and for sharing knowledge internationally and regionally in respect of prevention and management. The assessment will also suggest policy options for handling complex intersectoral trade-offs. Options such as strengthening international networks and customs controls, developing strategies and procedures for forecasting the spread of invasive alien species and preventing and controlling such spread will be assessed. The chapter will explore, where possible, information using scenarios and models for future invasive alien species trends, including their spread.

III. **Indicators, metrics and data sets**

20. Biodiversity and ecosystem service indicators serve multiple purposes that can broadly be categorized into three key functions: (a) tracking performance; (b) monitoring the consequences of alternative policies; and (c) scientific exploration. Assessments use these indicators mainly for the first two purposes.

21. The assessment will review the use and effectiveness of existing indicators, such as those developed by the Biodiversity Indicators Partnership, and will explore other possible indicators that could be used.

22. The assessment will survey the availability of data, recognizing that the scoping process indicated that such data are likely to be very patchy globally. Where possible, the assessment will be carried out at the country scale, or at a more detailed “actionable” scale when appropriate. Data collection and structuring should allow disaggregation based on relevant variables such as environment or system and taxa.

23. The assessment will use existing knowledge products and tools.

IV. **Relevant stakeholders**

24. Important stakeholders for this assessment will include decision makers who deal with biodiversity and borders and health. For such stakeholders, there needs to be a strong focus in the assessment on the benefits for countries and their people, including human well-being, of managing the risks of invasive alien species. However, because these species are often the result of intentional movement of species, or of human-driven processes such as trade, important stakeholders will also include international trade organizations, border officials and agencies involved in the intentional movement of species such as those in the forestry and agriculture sectors. Much invasive alien species prevention and management must be conducted at the local level. The assessment findings will therefore need to be communicated through context-sensitive material to a broad range of audiences at various scales, including indigenous and local knowledge holders. In addition, public demand for novel pets and ornamentals is a rich source of invasive alien species and many Governments will probably need support in communicating with this important risk-creating sector. Useful communication materials stemming from the assessment could also include training material for natural resource managers and case studies of successful invasive alien species prevention and management plans. The assessment will consider the benefits of building an invasive alien species
V. Capacity-building

25. The list of priority capacity-building needs approved by the Plenary at its third session will be used in the invasive alien species assessment.

26. Capacity-building with regard to invasive alien species will aim to improve human, institutional and technical capacities in the long term for the informed and effective implementation and use of assessments, for the development and use of policy support tools and methodologies and for improving access to necessary data, information and knowledge. It will draw upon the findings of the assessment, aiming to improve the science-policy interface. An important capability may well be the expertise to carry out assessments of existing and potential invasive alien species threats for any development or project and, based on these assessments, develop biosecurity plans and species management plans.

27. The assessment will identify gaps in scientific and other skills that are hindering the prevention and sound management of invasive alien species, including in relation to taxonomy, expertise in biotic impact assessment, active adaptive management, structured decision-making, systematic conservation planning and known response and management approaches (eradication, integrated pest management and biological control) and associated infrastructure.

VI. Process and timetable

28. Proposed revised process and timetable for preparing the assessment report, including actions, milestones and institutional arrangements, taking into account lessons learned from completed and ongoing assessments, are set out in document IPBES/6/8 on pending assessments.

VII. Cost estimate

29. A revised cost estimate for this assessment is set out in document IPBES/6/8, and taken into account in document IPBES/6/9 on financial and budgetary arrangements for the Platform.
Guidance on IPBES assessments for newly nominated experts

IPBES assessments synthesize and critically evaluate peer-reviewed scientific literature, grey literature and other available knowledge such as indigenous and local knowledge. The assessments include a review and synthesis, as well as an analysis and an expert judgement of available knowledge. Experts are guided in this work by a conceptual framework outlining the interaction between people and nature and by guidance on the conceptualization of values of biodiversity and nature’s contributions to people. An assessment does not involve the undertaking of new primary research but may include re-analysis of data and models to address specific questions. Figure 1 shows the different steps that an IPBES assessment process goes through.

Figure 1: overall IPBES assessment processes

IPBES assessments are made up of a selection of nominated experts namely:
- The assessment co-chairs
- The coordinating lead authors (CLAs) of the assessment chapters
- The lead authors (LAs) of the chapters
- The review editors (REs) of the chapters

They are complemented by:
- The IPBES fellows (normally one per chapter)
- Contributing authors (who are not formally nominated, but who are requested to contribute to a specific part of the chapter based on their expertise)
The different roles and responsibilities of the different types of nominated experts are listed in the table 1 below. It is to be noted that experts that are nominated and selected for a role within an IPBES assessment, accept the relevant conditions for the assessment. This includes that the time contributed to IPBES is committed on a pro-bono basis. Experts from developing countries as well as from economies in transition do however receive financial support to attend relevant IPBES meetings, such as the author meetings. This financial support covers the travel costs and the per diem for the days spent at the meeting. Selected experts of developed countries are to secure their own funding to participate in the meetings. Selected experts are expected to participate at least in all three author meetings, and will be asked to participate in other IPBES meetings as described in the final paragraph of each specific role in the table below.

Table 1: Roles and responsibilities of experts within IPBES assessments

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<th>Role</th>
<th>Responsibilities in the assessment</th>
<th>Advice for playing this role</th>
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<tr>
<td>Assessment co-chairs</td>
<td>The role of co-chair is normally shared between two and sometimes three experts. An assessment co-chair’s role is to assume responsibility for overseeing the preparation of an assessment report, as well as its summary for policymakers (SPM) and ensuring that the report is completed to a high standard and addresses the key scoping questions. A co-chair is senior in their field and has experience in coordinating work of experts. Besides overseeing the development of the assessment, the co-chair can also contribute text to one (or more) chapters. The co-chair is also responsible for collaborating and coordinating with the coordinating lead authors (CLAs) to ensure that the chapters are delivered in a timely manner and with a high standard and addresses the key scoping questions. The co-chair will ensure that the chapters feed into each other and that their messages are not contradicting. The co-chair participates in the setting of the agenda and the chairing of the author meetings. He/ she will work together with the management committee of the assessment to ensure that issues within the assessment are being solved and that the assessment is prepared according to the decisions and guidelines of the IPBES. Once the assessment and summary for policymakers are finalized, co-chairs also engage in the outreach for those deliverables. Assessment co-chairs are expected to contribute 30% of their time to the coordination of their dedicated assessment. They are expected to participate approximately 4 IPBES related meetings per year, for example: the author meetings, IPBES taskforce meetings, MEP meetings or Plenary and outreach events.</td>
<td>Get up to speed with the IPBES rules and procedures, as well as other assessments and deliverables Read other relevant assessments on biodiversity and ecosystem services (available in the catalogue of assessments) Organize regular skype meetings with chapter CLAs to stay in touch with the development of the chapters Invest in building trust amongst the authors as well as a sense of pride and ownership of the assessment process Review and check the key messages of the chapters in order to prepare the SPM</td>
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<td>Coordinating Lead Authors (CLAs)</td>
<td>A coordinating lead author’s role within an IPBES assessment is to assume overall responsibility for coordinating a chapter of the assessment report. Coordinating lead authors are lead authors who, in addition to their responsibilities as a lead author, have the responsibility of ensuring that the chapters of a report are completed to a high standard and are collated and delivered to the report co-chairs in a timely manner and conform to any overall standards of style set for the document. They are thus to coordinate the work of the lead authors, fellows and</td>
<td>Organize regular communication between the different LAs and fellows in your chapter Review the text received and structure information to create a flowing chapter Put deadlines for the author team to deliver text timely for</td>
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contributing authors involved in their chapter to ensure the quality of the chapter as a whole.

Coordinating lead authors also play a leading role in ensuring that any cross-cutting scientific, technical or socio-economic issues of significance to more than one section of a report are addressed in a complete and coherent manner and reflect the latest information available.

CLAs coordinate the pulling out of key messages of their chapter and the writing of the executive summary of the chapter. They contribute to the writing of the SPM.

**CLAs are expected to contribute 20% of their time to the coordination of their chapter. They are expected to participate in approximately 3 IPBES meetings per year, being the author meetings, relevant chapter meetings, taskforce meetings and outreach meetings and to coordinate the work of their chapter at the author meeting.**

| Lead Authors (LAs) | The role of a lead author is to assume the responsibility of producing designated sections or parts of chapters that respond to the work programme of the Platform on the basis of the best scientific, technical and socio-economic information available. Lead authors typically work in small groups that together are responsible for ensuring that the various components of their sections are put together on time, are of a uniformly high quality and conform to any overall standards of style set for the document. The essence of the lead authors’ role is to synthesize material drawn from the available literature, fully-justified unpublished sources, contributing author’s stakeholders and experts where appropriate. Lead authors can identify contributing authors who can provide additional technical information or graphics on specific subjects covered in the chapter. **LAs are expected to contribute 15% of their time to producing relevant sections and parts to their dedicated chapters. They are also expected to participate actively in the annual author meetings and could be invited to approximately 1 other IPBES meeting each year (normally being a taskforce meeting).** |
|**Review editors (REs)** | Review Editors are seniors in their field, and may represent a range of scientific, technical and socioeconomic views, and therefore have expertise in one or more natural and social scientific disciplines, and represent or have expertise in indigenous and local knowledge. The review editors get involved as of the review phase of the first order draft and help the author teams to address review comments during the second and third author meeting, and help to ensure that confidence terms are used consistently throughout the executive summary of the related chapter. In general, there will be two review editors per chapter, including its executive summary. It is also possible that an assessment has one or more overall review editors that review the entire report. Review editors are not actively the delivery of the different order drafts Identify gaps in the chapter author team and search for potential CAs to fill those gaps Actively participate in discussions within the chapter team about the content of the chapter Divide tasks amongst lead authors and identify the areas that each will write about Get familiarized with previous IPBES assessments to learn about the style and overall standards expected Collect peer reviewed literature for the author team to use When gaps are experienced in the chapter, consider where you could use a contributing author for to fill those gaps Get accustomed to the content of the chapter of which you are the review editor well before the Second Author’s Meeting Consider who would be suitable candidates for performing the expert review Refrain from imposing changes in the text to the author team Review the responses by authors to comments received |
engaged in drafting reports and may not serve as reviewers for text that they have been involved in writing.

The review editors’ main tasks are: (i) to assist the Multidisciplinary Expert Panel in identifying reviewers for the expert review process, (ii) ensure that all substantive expert and government review comments are afforded appropriate consideration, (iii) advise lead authors on how to handle contentious or controversial issues and (iv) ensure that genuine controversies are adequately reflected in the text of the report concerned.

Responsibility for the final text of the report remains with the relevant CLAs and LAs.

Review editors must submit a written report to the Multidisciplinary Expert Panel and, where appropriate, will be requested to attend a meeting convened by the Multidisciplinary Expert Panel to communicate their findings from the review process and to assist in finalizing summaries for policymakers and, as necessary, synthesis reports. The names of all review editors will be acknowledged in the reports.

Review editors are expected to participate in 2 meetings in total, being the second and third author meetings. They are expected to spend 10% of their time on the IPBES assessment, after the first order draft review stage onwards.

Be a good sparring partner to the author team and make good judgement calls

Be open to different perspectives and world views