1. In case of a technical invention, in general IPR belongs to the contractor and the public buyer gets the user rights. After this procurement, you need to procure again for buying the final product/enrol on larger scale. How can you ensure that your rights are taken into account (also financially)?

One could have a system agreed in advance to determine the price to be paid for the future implementation of the patent in the products/services, such as a fixed price (difficult to determine in advance), a preferential price (i.e. reduction of X % vs. the market price), market price, MFC (most favoured customer: the right to benefit from conditions that are identical to the most advantageous pricing which the contractor offers on the market to the "most favoured customer"), FRAND (fair, reasonably and non-discriminatory).

2. Are there any conflicts between the IPR's management and the state aid rules within the UE? If so, could you give examples of situations?

For information on the interplay between IPR and State aid, see Chapter 5 of the Guidance on Innovation Procurement https://ec.europa.eu/docsroom/documents/45975