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SECTION II

INTRODUCTION, EXECUTIVE SUMMARY AND CONCLUSIONS

1. This Report marks the start of the Italian Court of Auditors (herein referred to simply as ‘the Court of Auditors’) monitoring of Italy’s National Recovery and Resilience Plan (RRP) and Complementary National Plan (*Piano Nazionale Complementare/PNC)*. Article 7, paragraph 7, of the Italian Decree-Law No. 77/2021 of 31 May 2021, converted with amendments by Italian Law No. 108 of 29 July 2021, establishes that, "The Court of Auditors will exercise control over the management activity referred to in Article 3, paragraph 4, of Italian Law No. 20 of 14 January 1994. This monitoring activity particularly involves assessing cost performance, effectiveness and efficiency in obtaining and using financial resources derived from funding mechanisms like the RRP. This audit activity is based as well on cooperating and coordinating with the European Court of Auditors, as provided for in Article 287, point 3, in the *Treaty on the Functioning of the European Union*. As an exception to the provisions of Article 3, paragraph 6, of Italian Law No. 20 of 14 January 1994, the Court of Auditors should report to Parliament on the implementation status of the RRP at least once a semester.

Pursuant to the aforementioned Article, the auditing and analysis done by the Court of Auditors in 2022, as approved by the United Chambers for audit (*Sezioni riunite in sede di controllo/SSRR*) on 21 December 2021, includes preparing "Semester reports on the implementation of the National Recovery and Resilience Plan." This activity is among those to be carried out in the current funding period. It is further specified that these reports may also draw on already underway monitoring activity. The general aim of these monitoring reports is to provide an account of the advancements made in the reforms and investments implemented under the Plan and to record any progress or difficulties encountered. The resulting analysis should first consider achievements during the semester of reference. However, it should also assess compliance with the targets and objectives set and the potential recovery of lost ground due to delays or postponements during the previous semester. Analysis should then be extended to the entire Plan period by further considering any pending intermediate objectives to be met (even if not necessarily within the current reporting semester).

2. The Plan’s recent launch, and the still in-progress work of defining new interventions or identifying existing ones, have given this initial version of the report a provisional structure to build upon in future reiterations. In continuation, we first review the overall Report contents. We then consider what the main features of the fully operational report will be as determined by the contributions made by the United Chambers each semester via their assessments. As provided for under the audit activity, content will naturally also be added to the Report over time depending on the activities carried out. To this end, each content area will be linked to the corresponding responsible entities within the central and regional auditing Sections of the Court.

3. As previously mentioned, this first edition of the report specifically presents content linked to the Plan’s ongoing initial development phase and has thus been subject to a limited availability of information. However, this initial report still follows the organizational scheme around which it will be more fully developed in the future. This structure includes two Sections. Section I provides a status report on the implementation of the RRP (and the complementary Plan). Section II focuses on the general relevance of verifying intervention effectiveness and its worthiness in terms of focused study.

The main elements of the Plan are reviewed in Section I. This entails looking at the array of interventions involved and the timing of these measures by the responsible administrative entities. We focus on general programming aspects as written up as well as by mission and component. We also consider the overall framework of planned reforms and investments and other main factors prior to the pandemic crisis. We further consider capital expenditures promoted by the involved administrative entities, either directly or via regional administrators and companies. In addition to considering the total number of interventions, we also highlight their financial magnitude and associated financial programming from 2021-26. We further address the interactions of Plan activities with existing initiatives and the economic policy lines enacted to date by the involved administrative entities.

Particular attention is then paid to considering interventions by implementing actor and the expected regional responsibilities linked to Plan execution. These aspects capture well the complexity of programming involved and the challenge of effectively translating interventions into action.

The Plan's anticipated contributions in relation to cross-cutting objectives (linked to youth, regional gaps, gender equality and Do No Significant Harm/DNSH principles) are central to its overall dimensions. Evaluating alignment with European policy pillars, pursuant to the provisions of Article 3 of the RRF Regulation, is also important in this context.

Equally vital is considering how measures align with Italy's challenges as noted in the European Council's *Country Specific Recommendations* (CSRs). Finally, a paragraph is also dedicated to examining the goals and objectives involved in effectively translating the Plan into action through 2026. Consideration of these aspects and steps show the implementation process and framework as encompassing numerous regulatory elements, allocations, agreements and guidelines. The links involved in implementation presuppose strong collaboration moving forward between actors and different levels of government.

4. The second part of Section I is aimed at verifying Plan implementation measures. This section now (and in the future) will focus on both the recently concluded semester and effective outputs during the current one.

The aim is to evaluate programme progress and compliance in relation to the targets and milestones agreed to at the Community level as well as secondary goals of national importance. Achieving these objectives depends on making progress within the time frame set by the overall project. Consideration of results from the second semester of 2021 will occur alongside that of progress made in the first months of 2022 as well.

Verifying the structures put in place by the responsible central administrators to assure coordination between Plan activities will also certainly be a fundamental part of audit activity. In addition to complying with the provisions of Article 8 of Italian Decree-Law 77/2021, there is also a need to assure that functional coordination and implementation management aspects do not impact on audit activity. This means paying particular attention to having adequate numbers and levels in terms of technical and administrative capacities. Monitoring, reporting and control activities are also particularly critical in addition to implementation and especially management coordination. The effectiveness of the Plan will largely depend on all of these. Hence, this will entail identifying the staff assets, effective endowments and skill sets (administrative, economic and technical) upon which choices will be made.

Particular attention must thus be paid to defining the procedures covered in the Management and Audit System's descriptive document, which details interventions and schedules for all reform and investment activity. Verification also extends to setting up guidelines and operating instructions for implementing actors and the offices responsible for monitoring and supporting them. Preparing programme documents at the regional level will make it possible to extend this kind of analysis to local authorities as well.

The Plan's initial implementation framework will be rounded out by an examination of the financial procedures adopted. This will include verifying implementation and monitoring processes and the clarity of results reported in accounting documents. These will all comprise a fundamental part of the information system which is still being developed to facilitate Plan verification while providing an overall assessment of the economic policy action underway.

Finally, in-depth analysis is given to the management of "existing" interventions as of 2021. In the absence of any official indications, the Court has developed the budget-related chapters which address existing interventions that have been integrated into Plan activity. This, in turn, has allowed an initial assessment of the commitments and payments made during the current accounting period.

A brief look at the management of the Complementary Plan in 2021 is included as a chapter annex as well, providing (provisional) data on operational results.

5. Section II of this initial version of the report covers five areas in depth. First, we consider the infrastructure and public investment situation before the Plan. The aim is to review the well-known issue of Italy's accumulated lag in infrastructure over the last two decades. We consider the plan in light of this, focusing on efforts to relaunch investment in recent years as first evident during the three-year period from 2019-21 (or before the RRP). We also consider the programmatic framework set for gross fixed-capital formation in Italy.

Secondly, we examine pressures in the construction chain and price trends. These reveal some, and unfortunately not the only, evidence of prices heating up. This inevitably may generate risks and have an impact on the effectiveness of any measures, thus detracting from the Plan's anticipated effects. Any impacts on the various production chains most involved in Plan implementation are (and will continue to be) fundamental to account for in managing and evaluating measures. There should also be allowance for reprogramming within accepted margins.

As the Court has continually pointed out, human capital availability in central and regional public administrations presents one of the greatest weak points in terms of translating infrastructure investments into effective implementation. It is essential to have adequate technical roles in place for evaluating and generating the infrastructure needed for development and guaranteeing services to businesses and citizens. These kinds of roles are also required for aligning efforts with actual needs and maintaining sustainability. The choices which have been made in the Plan's initial phases are moving in this direction. However, the anticipated results have not always been achieved to date.

We conclude our analysis with in-depth consideration of two local public services affected by the RRP, i.e. water and waste services. Consideration of these services provides an initial example of the kind of sectoral analysis that will reoccur as part of the reporting process. The aim is to assess implementation status and the alignment of choices made during the operational phase to actual service improvement needs.

6. Section II the Report, which is dedicated to in-depth studies of increasing relevance, will be a reoccurring component. When fully consolidated and developed, it will cover overall programming characteristics while promptly identifying existing projects and new initiatives. In the process, greater importance will also be given to auditing intervention management as well.

Efforts will confirm implementation monitoring by verifying compliance with both European and national deadlines. This will therein address:

- operational structures put in place to supervise monitoring, management and resource payments; and
- coherence between intervention programmes and what the Plan foresees.

Spot-checks will be done on projects starting up during the semester and already underway to verify compliance with the criteria set for gaining project financing. Here, reference will be made to meeting selection criteria and consistency with the intervention's ultimate objectives. This activity will thus involve two distinct types of spot-checks on both initiating and underway projects, selected by individual project code (*Codice Unico di Progetto/CUP*) and with the aim of verifying adherence to set implementation standards.

It should be underlined that this auditing activity aims to support the verification work done by the responsible administrative entities. As such, it will integrate, support and strengthen these efforts. The criteria set for each intervention will be used as the exclusive benchmarks at each stage of verification. Compliance with the conditionalities linked to measures (e.g. respect for gender equality, youth employment objectives, share of resources to be allocated to Southern regions) as well as DNSH principles will all be considered.

Reporting of any inconsistencies, discrepancies or deviations from the agreed and defined set objectives or intervention timeframe will be addressed as well in the semester Report. The responsible administrative entity will be specifically notified of the need to undertake any necessary corrections.

The spot-checks done by the United Chambers will be conducted in a way that ensures adequate representativeness at the mission/component level as well as by region. The various responsible Sections of the Court will be involved according to their area of expertise. In particular, the Regional Sections will be responsible for verifying the projects underway in their respective Regions.

The Court will also carry out spot-checks of the monitoring structures within the responsible administrative entities. This will be done to verify operations linked to: adequate legality reviews; compliance with accounting principles; traceability of operations and accounting codes; criteria assumed in selecting implementers (if other actors are involved); regular management and expense procedures; compliance with measures aimed at preventing, detecting and correcting irregularities; and supporting administrative entities entrusted with executing activity.

Auditing must subsequently involve choices made in terms of pre-set quotas or intermediate and final ones. In this context, efforts should track necessary spot-checks or choices made to change executing or implementing agents or responsible administrative entities. Verification will also address compliance with any financing points indicated in public calls for proposals or any other agreements provided for with regard to individual interventions.

Compliance with the "informative" contents provided in the basic documents will be important. It is vital to underline that this will involve an audit different from what is done on documentation when certifying expenditure at the European level. Verifying compliance with the provisions of Article 34 of Regulation 2021/241, and ensuring adequate “visibility of the Union funding", means verifying that the responsible administrative entities provide updated information on the projects they are responsible for. It also means verifying the pertinence, timeliness, completeness and significance of the information provided by the implementing actors on intervention progress as well as any related data on the impact and effects of completed investments and/or reforms.

It will also be important to verify information flows as well as monitor achieved European programming milestones along with intermediate accomplishments. These are all part of achieving good results. In addition to REGIS, other existing satellite systems may also be used. However, it is essential that these other systems interface with the main one. It is also important to obtain a complete map of these systems, and of any process monitoring done in terms of features and responsibilities, as soon as possible. In this context, the national network of the Court’s regional joint auditing Sections will be important in verifying audit measures linked to compliance with set mission guidelines.

Finally, monitoring must also consider the results and effectiveness of the measurement efforts foreseen by central controlling authorities in terms of indicators and compliance with intervention-monitoring requirements.

7. The first chapter of this initial 2022 Report notes the salient features of the RRP in the context of the overall European panorama. The legislative choice of opting for such a very large and demanding project has been stressed. The wide scope is indicated by the number of projects (283 under the RRP and 320 including the National Plan for Complementary Investments) and resources (38% of the total funds committed by the Recovery and Resilience Facility within the NGEU programme and 74% of the funds disbursed as loan-only securities) involved. It is also important to underline the critical role administrative entities play in Plan management. Given this and their monitoring role, we thus also provide a broad overview of their involvement. The total number of interventions made will range from 39 to 65, if we consider those financed by the Complementary Fund as well. The three administrative entities most involved are: the Ministry of Sustainable Infrastructure and Mobility (*Ministero delle Infrastrutture e della Mobilità Sostenibili/MIMS*) with a total of 65 projects of which 49 are under the RRP; the Presidency of the Council of Ministers (*Presidenza del Consiglio dei Ministri/PCM*) with a total of 60 projects of which 55 are under the RRP; and the Ministry of Technological Innovation and Digital Transition (*Ministro per l'innovazione tecnologica e la transizione digitale/MITD*) with a total of 39 projects of which 38 are under the RRP. These administrative entities are responsible for EUR 40 billion, EUR 34.7 billion and EUR 19.6 billion, respectively. These amounts rise to EUR 49.5 billion, EUR 39.2 billion and EUR 23.2 billion, respectively, taking into consideration the Complementary Fund. Other Ministries are also extensively involved, including as co-actors, and many of them foresee the potential for significant growth in terms of resources, commitments and responsibilities within certain action areas (missions and programmes).

8. The decision to aim for a broad-reaching Plan is well highlighted by the many areas covered by its reforms and its programmed investments. Activity extends to six Missions (and 16 Components) which face the challenges posed by: a) the digitalization process and ecological and climate-related transitions; b) advances in new technological paradigms entailing significant growth in scientific research and knowledge and implications for labour policies; c) increasing the resilience of social protection systems, starting with the most vulnerable ones first and strengthening the health system which was severely challenged by the pandemic. Such a wide scope implies that significant management efforts are required from the involved administrative entities. It also means considering the particularly challenging timeframe set for developing the NGEU initiative. The nature of the investments and reforms foreseen under the Plan and prior status of the involved administrative entities highlights several issues. First, in many cases, projects have moved ahead because they form an integral part of a prior, long-term, development trajectory. These projects can now be more concretely developed with the freeing up of grant funds or budgetary constraints. The resulting continuity or points of overlap with prior efforts may represent a guarantee (rather than a drawback) in terms of being able to efficiently implement the many projects envisaged.

9. The effects of the RRP on public finance balances will be both direct, i.e. in terms of first impacts (which are closely tied to the nature of the funds used being grants or loans). There are also indirect impacts to the extent that the planned initiatives are successful at the macroeconomic level. This, in turn, will generate "feedback" effects in terms of higher growth. As a result, there will be lower deficits and debt in terms of both absolute value and in relation to the GDP (due to the increase in size in ratio denominators).

The potential economic effect of the Plan has been officially estimated as a 3.6% increase in GDP by the end of the programme period. This is compared to predicted baseline GDP growth without the RRP of 2.7% or 1.8%, respectively, based on medium or low increase scenarios and more restrictive technical assumptions. Growth will of course also depend on the quality, size and timing of interventions. This raises the importance of financial planning over the entire period as well as the influence this may have on operator expectations. Here, the data show that already by the 2021 financial year, more than EUR 12 billion in resources were set to be activated (or EUR 15 billion if we consider the complementary funds as well). However, these trends may accelerate further from 2022 on, with planned annual expenditure reaching EUR 27 billion that year. This might further increase significantly over the following three years to EUR 36 billion in 2023, EUR 44 billion in 2024 and EUR 40 billion in 2025. In the closing year of the Plan, the remainder left to be used may be equal EUR 30 billion. The peak effort in terms of staff and spending capacity is therefore expected during the two-year period from 2024-2025.

10. Importantly, the Plan has the potential to offer significant achievements in terms of the so-called cross-cutting objectives. It is estimated that about EUR 123 billion out of a total of EUR 191.5 billion will contribute to youth employment growth. EUR 149 billion is expected to have an impact on reducing regional gaps and EUR 114 billion should contribute to strengthening gender equality. All RRP measures are subject to the DNSH criterion and all Member States must account for these. In this context, it is estimated that measures corresponding to 45.6% of the total funds (EUR 87.3 billion) are designed in such a way as to guarantee a substantial contributions to this end (under the so-called regime 1) while 54.4% (EUR 104.2 billion) guarantee exclusive compliance with DNSH principles (under regime 2).

11. The Plan will contribute significantly to all six pillars that Regulation (EU) 2021/241 indicates as the foundations of the NGEU. These pillars include: the green transition; digital transformation; smart, sustainable and inclusive growth; social and territorial cohesion; the health and resilience of institutional systems; and policies for the next generation. Equally relevant will be the contributions envisaged for overcoming Italy's 12 specific challenges as identified by the European Commission in its 2019 and 2020 recommendations. It is also estimated that a direct contribution to the so-called common challenges and seven key programs (Flagship Programs) identified at the European level will be made by 56% of the interventions (157 out of the 283 total). 65 of these relate to the modernization, 35 to skill updating, 22 to start up under the European Green Deal (and the related renewable energy target) and 20 to restructuring. Out of a total of EUR 114 billion in resources involved, approximately EUR 39 billion is allocated to the reconstruction programme, EUR 18 billion each to skill updating and modernization, EUR 11 billion to upscaling and smaller amounts to the remaining three programmes.

12. The final section of the chapter turns to programme implementation and provides an overview of the actors involved. They are considered in terms of their location (national or regional) and types (Ministries, Regions, Public Agencies, etc.). A detailed analysis of the entire range of goals and objectives to be reached by Italy over the full course of the RRP is also presented.

Regarding location, the analysis shows that EUR 70 billion (37% of financing) is linked to regional implementing actors and EUR 121 billion (63%) to national level ones.

As for objectives, the analysis carried out highlights that the European and national level goals fulfil different but complementary functions. In terms of European-level targets, solid financial resources allow effectively and quickly taking up measures needed for concrete programming in regions that are key to European designs and planning. In the initial semesters, this will involve focusing on creating the basic conditions needed to solidly reach Plan objectives in the final programme phase. Meanwhile, the national level objectives are designed to carry out a type of "internal surveillance". Once the foundations for interventions are established, they will trigger the internal timing needed to guarantee reaching the agreed objectives.

The full range of objectives aims to ensure that contributions come from actual implementers as well as effective collaboration between different actors and government levels. This, in turn, should limit the time given to any consultations beyond those needed for setting up an adequate regulatory framework. In the case of certain objectives, the responsible implementing actors will particularly need to cultivate institutional dialogue around measures whose success depends on coordination.

13. The analysis carried out highlights how implementation is moving forward with the involvement of all the institutional actors without thus far having experienced any particular delays.

Targets or milestones have been or are being implemented during both the initial programme semester (i.e. the second part of 2021) as well as the current one. This applies to goals that need to be met for compliance at both the European and national level. The initial 51 objectives set for the last semester have all been achieved as the European Commission recently acknowledged. These achieved objectives encompass 63 initiatives (22% of the total number) and EUR 46.5 billion in financial resources (about a quarter of the total plan resources). Moreover, 15 other objectives have no further milestones or targets to be reported to the European Union (constituting 5.3% of the total number of initiatives and a total of EUR 1.5 billion). In the absence of any formal monitoring and reporting process for domestic targets, analysis carried out by the Court of Auditors shows a lower implementation rate (69%) for national-level objectives. However, in some cases achieving a specific European-level objective has entailed achieving the related national-level one.

During the current semester, the Plan will move ahead with another 45 European objectives, 6 of which have already been achieved. The new milestones and targets to be met involve a further 50 RRP projects. This adds up to a total of 113 initiatives which are part of the European-level objectives (accounting for approximately 40% off all objectives and EUR 79 billion or 41% of total financial resources). In addition, there are 70 national-level intermediate objectives set for the current semester and a further 55 targets linked to projects financed by the Complementary Fund.

14. It is a particularly packed moment in terms of time, complexity and launching reforms, be they "accompanying" or "enabling" ones. Initial steps have been taken in areas in which important results are expected in the near future with regard to European-level compliance and, above all, national growth. This is the case, for example, with tax administration reform. However, translating reforms in this area into permanent, structural, tax-system improvements requires further actions that are not central to the currently outlined strategy.

There is also a need to improve administrative procedures in order to enhance compliance with tax obligations. Tangible results are expected in this area by the end of the current year (and include a 15% expected increase in compliance letters and the resulting revenue). This will result in a "phase of substantial evaluation and operational planning regarding the actions and measures to be undertaken".

Similar considerations apply to the tax reform measures "accompanying" the Plan. The content of these measures has not yet been fully outlined, especially in terms of the range of options for setting up an effectively dual model, the reform of the land registration system and measures aimed at streamlining the tax-break system. The reform of tax collection procedures is also not addressed. As the Court has repeatedly noted[1], reform in this area is of utmost importance in the overall strategy to counteract tax evasion.

The steps taken in relation to reforming the public-spending review framework are also still at an initial phase. Here, the Scientific Committee foresees setting up quantitative objectives for the three-year period 2023-2025. However, specific methods and areas for action have yet to be identified. The prompt relaunch of the spending review cycle will be a prerequisite for recovering the savings margins needed to walk back levels of public expenditure reached during recent health emergency. In any case, these are reforms which will promote greater fairness while improving competitiveness within the production system. This has become even more important in a macroeconomic setting where uncertainty is increasing relative to international pressures.

15. However, the analysis that can be carried out remains limited. We do not yet have an overall picture of the specific already "in-place" measures linked to the Plan because of the slow start-up of information system forecasting. This will involve knowing the outcomes of important and already-underway investments that are moving ahead, but are not addressed by the milestones and targets set for this first phase.

In addition, currently available data on complementary projects indicates only partial progress towards what was originally planned. Only slightly over 50% of the allocated amounts have been committed and paid out.

We need to recognise that the strong growth in resources provided by the RRP and Complementary Plan is occurring in the context of highly increased capital expenditures due to the health crisis. For some administrative entities, in particular, this has meant a high increase in management costs. Outside of what has been envisioned by the RRP and national Plans, capital expenditure rose from EUR 47 billion to EUR 95 billion from 2019-2021. Appropriations will remain at high levels over the 3-year budget period from 2022-24 (standing at EUR 85 billion in 2022 and stabilising at from EUR 79 to EUR 80 billion over the following two years). Adding to these amounts above are the Plan resources which comprise an additional EUR 22.4 billion in 2022 and EUR 30 billion and EUR 37 billion, respectively, over the following two years. Remarkable efforts need to be undertaken above all in this context because of highly "constrained" programme timing.

From this perspective, it is fundamental to have adequate administrative structures and design capabilities for assisting and guiding the implementing actors, effective

[1] See the United Chambers for audit's 2021 Report on the Coordination of Public Financing (*Rapporto 2021 sul Coordinamento della finanza pubblica*) entitled *Reflections for a reform of compulsory collections (Riflessioni per una riforma della riscossione coattiva),* p. 139 et seq.; and the *Report on General Government Statements 2020* (*Relazione sul Rendiconto generale dello Stato 2020)*, Volume 1, Book I, point 2.4.7, "Factors preventing the collection of charges *(Fattori ostativi alla riscuotibilità dei carichi)*", p. 140 et seq.

coordination between government levels and a rapid and incisive regulatory framework. Although there are positive signs in this regard, significant lags in implementation persist.

These relate to respecting the timeframes involved in updating procurement legislation. This, in turn, involves both temporary measures having immediate effects and making structural changes to codes. It further involves continuing reforms that will lead to a stable regulatory structure within the sector. It also entails evaluating the effectiveness of the medium-term simplification efforts introduced and considering the possibility of making them permanent.

Substantial progress has been made in the area of administrative capacity building via the recruitment plans specifically provided for by Italian Legislative Decree No. 80/2021 as well as other administrative simplification measures resulting from other Legislative Decrees, namely No. 77/2021 and No. 152/2021. These efforts are key in terms of speeding up the required decision-making phases within the public administrative sector, but need to be given time to consolidate in order to have a full effect.

16. Implementation has gone slower than wished within the individual administrations responsible for the technical coordinating structures linked to the RRP. On one hand, the regulatory acts linked to set up and elaboration have been adopted. On the other, the organizational capacities of the involved structures have not developed as quickly. This is particularly the case regarding management positions since approximately 40% of posts in this area have not been assigned. There are also instances of an almost complete lack of cover in terms of some management posts. The resulting risk is that these organizational difficulties will lead to delays in or present hurdles to project implementation. This is already evident in the low rate of compliance by technical structures in adopting management documentation, especially in defining procedural management and control systems or elaborating action timelines.

There is also still a limited availability of technical structures supporting central reforms and design capabilities within regional administrations. There is no substitute for this kind of support, the lack of which may lead to losing funds or the need to reprogram interventions using reserves. These difficulties are greater among local authorities, especially in Southern areas of the country. This is because of the concentrated timeframes around calls for projects and resource allocation. These calls started in December 2021 and have particularly narrow windows for applying (2 months on average). In this regard, it is essential to make a wide range of technical assistance tools and technical and administrative capacity building measures promptly available at the regional level. To this end, the General Public Accounting Office (*Ragioneria generale dello Stato*) has set up a specific, technical-coordination, working group dedicated to providing technical assistance and this is a step in the right direction.

Finally, tight implementation deadlines have led in several instances to focusing investments on the construction sector and supporting innovation by procuring equipment or retooling existing technology stock. These measures have been adopted in order to meet timeframes and because they are most doable.

These kinds of structural implementation efforts must be carefully monitored in terms of actual needs to avoid unused assets. It is also important to assure that burdens are not transferred to future generations who play no role in accruing them (this includes looking beyond the Plan horizon). It also further implies considering current costs that may become permanent and need to be adequately covered.

17. The first chapter in Section II of the report provides an analysis of the public investment situation. Long-term developments are first considered including in comparison to other major European countries. Here we highlight Italy's deep accumulated lag in terms of infrastructure endowment. From 2007-2019, investments in this area cumulatively fell by 29% in real terms. As a result, new flows were not sufficient to compensate for capital stock depreciation. This was accompanied by inadequate maintenance of existing infrastructure. The result has been a serious decline in overall infrastructure which has become increasingly apparent in recent years.

These developments also encompass well-known regional gaps and have been further affected by the accumulated public impact of debt reduction policies. This has all occurred in a context in which reducing expenditure on other items has been difficult and revenue has suffered due to weak growth. The overall situation has also been partly connected to a limited implementation and design capacity, especially among local authorities which play an important role in public works activity. It is also linked to regulatory difficulties and the uncertainty triggered by continuous changes in local authority financing rules. All this has discouraged more ambitious spending programmes which require medium-term planning.

The declining public investment phase seems to have ended in 2018. Over the last three years, there has been a substantial recovery (with a 27% increase in real cumulative growth). Public investment now accounts for 2.9% of GDP, a level just below that of the pre-financial crisis years. The watershed moment signalled by the 2019 results derived from the impact of regulatory interventions in two areas that are critical to public spending and investments, namely public procurement regulation and local authority budgetary rules. The freeing up of restrictions linked to the internal Stability Pact also created greater financial space and growing contributions to finance public works involving schools and regional and building safety.

Analysis of the database of the Information System on the Operation of Public Entities (*Sistema informativo sulle operazioni degli enti pubblici/SIOPE*) shows that, despite an increase in the share of public investments due to the stabilisation measures during the health emergency, all the involved institutional actors have concurrently increased investments. Disaggregating the previous year's expenditure by region, we see more dynamism in island areas and Northwest regions of the country compared to more constrained activity in the Northeast. As for the sectoral makeup, there are no notable differences at the regional level. This suggests that the funding lines identified at the central level have addressed strategic development priorities and had a proportionally uniform impact on entities. This has occurred alongside a focus on regional and public building safety, with priority given to schools. It has also involved developing design skills and sustainable development efforts which further address energy efficiency and mobility.

The growth phase in Italian public investments underway since 2019 will be strengthened in the coming years due to the resources put in place by the RRP. This outcome is, in fact, explicitly stipulated within the Plan objectives, although the timing for the acceleration of investment has not yet been fully defined. As indicated in the most recent National Economic and Finance Document (*Documento di Economia e Finanza/NaDEF*), the Plan is disaggregated by year. Distinction is made between current expenses, investments, other capital expenditures and revenue reductions. However, the period referred to is only for 2020-2024, leaving the last two years uncovered. The indications in the NaDEF also refer only to the interventions financed by the RRF (Recovery and Resilience Facility). Distinction is made, however, between grants and loans. With loans, there is no reporting on the component relating to new projects or replacement interventions which have already been accounted for. However, this is an element of uncertainty that will disappear over the Plan's progressive implementation.

Taking these factors into account, the fourth paragraph provides an initial reconstruction of the expected impact of the RRP each year from 2020-2024 based on available official data. The programme route for building up public accumulation is explained in the NaDEF relative to expenses financed by the RRF. This is then extended to include the resources of the Complementary Fund and the React-EU programme.

The investments financed through the RRF amount to over EUR 15 billion in 2022, EUR 21.6 billion in 2023 and EUR 34.4 billion in 2024. By comparison, the component financed through the Complementary Fund will equal EUR 4.7 billion in 2022, EUR 4.3 billion in 2023 and EUR 3.5 billion in 2024. In cumulative terms, the RRP will finance investments totalling EUR 93.5 billion over the period. Approximately EUR 80 billion will be financed via the RRF and close to EUR 13.5 billion via the Complementary Fund. The additional component linked to investment financed by the RRP is estimated at approximately EUR 11 billion in 2022, EUR 15.8 billion in 2023 and EUR 24 billion in 2024, for a total value of EUR 56.9 billion.

18. Between 1997 and the outbreak of the pandemic, the construction sector in Italy experienced distinct phases in terms of economic trends. Prior to the financial crisis, there had been an investment boom in the sector and enhanced and energetic price reactivity. Subsequently, there was a sharp contraction in real and nominal terms which lasted until 2015. Beginning in 2015, the sector began to experience a slow and gradual recovery, showing a greater volume of shares. This was then abruptly interrupted by the COVID-19 pandemic in 2020. The consequent transformation in work methods and lifestyles, together with generous tax incentives, allowed growth to resume with renewed strength by the summer of 2020. However, this growth has not been supported by supply factors, which have been weakened by material and labour scarcity. According to recent forecasts (by *Unioncamere*), the planned recruitment of skilled workers in the building construction and maintenance sector, and of general construction-sector personnel, will be particularly difficult. This is especially true for skilled-worker recruitment due to a lack of candidates and insufficient training. After several years of contraction, the construction sector today appears unprepared relative to the number of companies in play and their size.

19. The public sector has an important role to play in implementing the National Recovery and Resilience Plan. Given the need to implement the various projects that it encompasses, adequate management and administrative capacity at both the central and local administrative level is key. In recent years, however, public administration staff numbers have significantly contracted as a result of various measures for controlling public spending. So-called turnover presents an obstacle limiting the recruitment of new staff to replace retirees. In addition to a decline in the number of workers employed in public administration, another consequence has been an increase in the average age of civil servants in Italy, who are now among the oldest in the West. In addition, the lack of personnel turnover has limited the entry of new professional types who may be more adapted to pressing, contemporary, public administration needs. In 2020, the total employment rate for public administration graduates in law and economics stood at 13%. Among graduates in technical areas (engineering, architecture, urban planning) the rate was only 3.9%. Some professional areas are in great demand due to technical change and the on-going digital transition (these include chemistry, physics, mathematics, statistics, computer science, biological sciences and biotechnology). However, the employment rate for graduates in these areas still also currently stands at only 5.6%. With recent measures, an important effort has been made after years of limitations to recruit new staff. In order to make public employment more attractive, especially for positions requiring high-level technical skills, an additional functional area may be established. This area will encompass highly-qualified specialist personnel playing an intermediate role between staff and managers. These are all important steps whose effectiveness will need to be evaluated.

20. With the implementation of the RRP, Italy’s integrated water services have been faced with closing existing historical gaps and laying the basis for confronting new challenges posed by climate change, reduced water-resource availability and environmental protection. Many steps forward have been made since 2012 when the regulatory mandate was given to the Italian Regulatory Authority for Energy, Networks and Environment (*L'Autorità di Regolazione per Energia Reti e Ambiente /ARERA*). This step further established the "single management" of optimal regional areas in 2014. Progress in the Centre-North Regions, however, has been accompanied by more limited advancements in certain Southern areas, in particular in Campania, Molise, Calabria and Sicily.

The data characterising the water-service divide clearly show that the greatest delays affect regions where reorganization of the "chain of command" is still in progress, a lack of industrial operators exists and direct management of Municipalities persists. In these areas, lack of action and non-compliance by both local public authorities and Regions have thus far halted sectoral development. The creation of a public-owned company involving state and regional participation was indicated under the 2018 Stability Law in order to restore the water supply in the Southern Apennines District. This company, however, has yet to emerge.

The gap in the management and provision of water services has therefore expanded, clearly highlighting the need for a centralised initiative focusing on the South. In this context, the RRP does indicated a schedule of reforms and investment lines for closing divides.

Between the end of 2021 and the first months of 2022, several measures were implemented or launched. However, certain aspects remain that need to be rapidly strengthened in order to not jeopardise access to RRP funds or miss out on the chance for a new start. In particular, there is the issue of speeding up the time needed to establish a water-supply company in the South. This company would afford the necessary interventions and management of water-resource transfers between Southern regions. To guarantee this, deadlines should be set for assigning a single manager in each area and establishing enforcement measures. This should involve setting up sanctions for administrations that fail to comply. It will also involve a strong, worthwhile, central initiative to give transitional assignments to actors that have the industrial and organizational capacity to overcome the shortcomings of a single-manager approach. In any case, support may also be given to setting up trusted operators from scratch in order to guarantee access to RRP funds and carrying out works.

In the coming years, the waste cycle management sector will be affected by profound changes, particularly because of the implementation of Community policies and strategies aimed at developing the circular economy.

Several obstacles still prevent effective and efficient waste management in Italy. One thinks of the regional gaps in terms of critical categories of waste, such as undifferentiated and organic waste, or the failure to have complete waste governance throughout the country. There is also the long timeframes involved in developing operations responsible for managing different phases of the waste cycle. This is particular the case for waste treatment and disposal, but also in relation to the NIMBY and NIMTO syndromes and gaps in quality of service.

With regard to waste-sector provisions in the RRP, the reform pillar is key. This is the case since no significant infrastructure investments have been planned given the budget of just EUR 2.1 billion. The contributions made by three sectoral reform interventions in particular will therefore be decisive. These include the National Strategy for the Circular Economy, the National Programme for Waste Management and technical support to local authorities.

With regard to the Plan's progress in terms of waste, the first semester and second quarter of 2022 will be critical. Once the contents of reforms are more fully defined, a clearer picture of infrastructure interventions should begin to emerge.

The information made available via the preliminary versions of the reforms provides a good starting point, at least for the National Strategy and Programme. However, it seems appropriate to suggest some additional developments which, if accepted, would allow for more effective reforms.

As for investments in the waste sector, there was a 1-month extension in the application and call for proposals period due to the limited numbers received from the Southern region of the country, where infrastructure gaps are greatest. This extension has made it possible to increase the quality of the overall proposals received, especially those coming from the South. In this context, it is essential to identify and create facilities while respecting the stringent time limits set for RRP implementation. Activity should thus begin first in those areas of the country with the greatest need.