**Appendix 2: Bilateral agreement between WESTERN AUSTRALIA and the Commonwealth on schools reform**

**Preliminaries**

1. The State of Western Australia (Western Australia) and the Commonwealth acknowledge the Traditional Owners of the lands and waters on which Australians live, learn and work, and pay respects to their Elders past, present and emerging.
2. This Agreement satisfies the conditions in paragraph 22(2)(b) of the *Australian Education Act 2013* (the Act) requiring each state and territory to be party to an agreement with the Commonwealth relating to the implementation of school education reform.
3. Aboriginal and Torres Strait Islander cultures and knowledges are fundamental to shaping and improving education systems and outcomes for Western Australia’s Aboriginal and Torres Strait Islander students. Western Australia and the Commonwealth commit to ensuring that the implementation of this Bilateral Agreement is undertaken in a way that will enliven the priority reforms of the *National Agreement on Closing the Gap* (Closing the Gap Agreement).
4. Western Australia and the Commonwealth acknowledge that Australia has a strong education system, but it can be better and fairer. To do that, governments and school systems need to ensure every student is supported to succeed by having their needs identified and met as early as possible.
5. Western Australia and the Commonwealth reaffirm their commitment to the vision for Australian schooling outlined in the *Alice Springs (Mparntwe) Education Declaration* (the Mparntwe Education Declaration) for a world class education system that encourages and supports every student to be the very best they can be, no matter where they live or what kind of learning challenges they may face.
6. Western Australia and the Commonwealth signed a Statement of Intent on 31 January 2024. This Bilateral Agreement reflects the Statement of Intent and other commitments negotiated between Western Australia and the Commonwealth.
7. The Heads of Agreement sets out the shared intention of the Parties to that Agreement to work in partnership to improve education outcomes for all Australian students and build on the capability and capacity of the education workforce. This Bilateral Agreement outlines the actions and activities Western Australia will undertake to achieve these shared objectives.
8. This Bilateral Agreement between Western Australia and the Commonwealth will commence on 1 January 2025 and expire on 31 December 2029, unless a variation is agreed in accordance with clause 28 of the Heads of Agreement.
9. Under section 22 of the Act, a bilateral agreement must be in place. Clause 25 of the Heads of Agreement indicates that, following the expiry of this Bilateral Agreement, a new bilateral agreement will commence from 1 January 2030 unless otherwise agreed in accordance with the processes specified in clauses 26 to 29 of the Heads of Agreement.
10. The terms of this Bilateral Agreement do not limit Western Australia’s and the Commonwealth’s ability to agree different terms as part of a future bilateral agreement.
11. For the avoidance of doubt, clauses 8 to 10 of this Bilateral Agreement do not limit either Party to pursue variations to, or withdrawal from, either this Bilateral Agreement or the Heads of Agreement in accordance with clauses 26 to 30 of the Heads of Agreement.
12. Should the Commonwealth provide more favourable funding terms to another state or territory (with the exception of the Northern Territory) as part of the Better and Fairer Schools Heads of Agreement or Bilateral Agreement, then the Commonwealth will offer Western Australia those terms as well and, if agreed by Western Australia, this Bilateral Agreement will be updated accordingly. For the avoidance of doubt, Western Australia will receive an equivalent Commonwealth SRS funding percentage point uplift at least equal to that negotiated with other jurisdictions (with the exception of the Northern Territory).
13. Clause 12 above also includes but is not limited to:
    1. an adjustment to the measurement of state funding contribution included in another jurisdiction’s Bilateral Agreement (with the exception of the Northern Territory)
    2. any agreement the Commonwealth makes with any other state or territory which favourably impacts on that state’s financial contributions or risk sharing arrangements under the agreement.

In either of these cases these terms will also be made available to Western Australia, and this Bilateral Agreement will be updated to take into account the adjustment or material change to circumstance.

1. This Bilateral Agreement may also be updated through written agreement of the Commonwealth Education Minister and the Western Australian Education Minister if there is a material change in the State’s circumstances, beyond its reasonable control, which will affect Western Australia’s fiscal position or the recognition of the State’s funding contribution, in accordance with the process in clause 28 in the Heads of Agreement.

**State Reform context**

1. The Western Australian Government is committed to ensuring all Western Australian children receive a high-quality school education, no matter where they live or their background.
2. In 2024, there were 1,147 Western Australian schools, including 832 public schools, and 315 non-government (Catholic and independent) schools. There were 494,126 students in Kindergarten to Year 12 enrolled, with 326,286 (66 per cent) students in public schools and 167,840 (34 per cent) across Catholic and independent schools.
3. The State’s geographical and cultural diversity offers unique opportunities but also significant challenges in providing an equitable, quality education to all students.
4. Over a quarter (27 per cent) of Western Australia’s schools are in outer regional, remote and very remote areas. Such schools tend to be relatively small, educating 12 per cent of the State’s school students (compared to 9.4 per cent in such schools nationally); however, they educate 44 per cent of the State’s 34,854 Aboriginal students.[[1]](#footnote-2)
5. Western Australia has a diverse range of schools that cater for the needs of students and local communities.
6. The non-government schooling sector is an important part of Western Australia’s education system, contributing to educational choice and diversity and providing students, parents and caregivers with options in respect of learning approach, faith and philosophy.
7. The State has progressed a significant reform agenda. A continued focus on student progress and achievement is at the centre of the State’s education improvement efforts.
8. The Western Australian public school system has been guided by the strategic directions for public schools 2020-2024 *Every student, every classroom, every day*, which sets clear aspirations for every student and focuses on improvement drivers across 6 pillars to strengthen support for teaching and learning:
   1. Providing every student with a pathway to a successful future.
   2. Strengthening support for teaching and learning excellence in every public school classroom.
   3. Building the capability of our principals, our teachers and our allied professionals.
   4. School autonomy within a connected and unified public school system.
   5. Partnering with families, communities and agencies.
   6. Using evidence to drive decision-making at all levels of the education system.
9. In supporting these strategic directions, the Western Australian Department of Education has worked with the profession to develop 2 key strategies. These focus on high quality teaching and student health and wellbeing:
   1. The Western Australian Department of Education’s Quality Teaching Strategy, launched in 2022, makes clear its position on effective teaching practice. It also defines aspects of school culture that support teacher growth and enable all students to progress and achieve.
   2. The Western Australian Department of Education’s Teaching for Impact anchors the Quality Teaching Strategy and details those strategies, shown by research, to have the greatest impact on student learning. The Quality Teaching Strategy also features the Western Australian Department of Education’s Phonics Initiative, introduced in 2023, and its Centre for Excellence initiative, both of which support the development of literacy skills in students from an early age.
   3. The State has made a considerable investment in student mental health and wellbeing and in 2024, the Western Australian Department of Education launched *Student Wellbeing and Care – Future Directions*. A Western Australian Department of Education initiated Student Wellbeing and Care Taskforce served to clarify expectations for school staff and support schools to embed effective approaches to support the mental health and wellbeing of all Western Australia’s public school students.
10. The State continues to invest in high-quality early learning to support children to make a positive start to their education. These school-based programs are free to all students, are led by qualified teachers and are located in almost every town across the State. In Western Australia, there is almost universal participation of 4 year olds in school-based Kindergarten (the year before fulltime school), including among priority equity cohorts.
11. Meeting the needs of students with disability continues to be a priority for Western Australia. In 2024, a review of the *School Education Act 1999* (WA) commenced to strengthen disability support for students.
12. The State Government also progressed a review of senior secondary school pathways in a bid to ensure all Western Australian students can reach their full potential through their post-school study, training or employment pursuits.
13. The Western Australian Department of Education continues to prioritise building a culturally responsive public schooling system to strengthen Aboriginal students’ wellbeing, engagement and achievement.
14. Attracting sufficient teachers with the right skills to the right areas, particularly in secondary schools, regional areas and in areas of specialised skill continues to be one of the greatest challenges and highest priorities for Western Australia. The Western Australian Department of Education continues to monitor teacher workforce supply and demand, to respond to emerging needs and trends.
15. Investigations into the drivers of excessive teacher and leader workload in Western Australian public schools, as well as work on reducing administrative burden, has also been a focus.
16. The activities listed above are provided for context and are not considered part of this Bilateral Agreement for the purpose of paragraph 22(2)(b) of the Act.

**Part 1 — PURPOSE, OBJECTIVES, OUTCOMES AND IMPROVEMENT MEASURES**

1. Western Australia and the Commonwealth acknowledge that a high-quality school education is critical to ensuring Western Australia’s students will succeed in an increasingly complex world. Australia’s future stability and economic prosperity is reliant on a high-quality, equitable and inclusive school system.
2. This Bilateral Agreement sets out the reform activities to be undertaken during its term to give effect to national objectives, outcomes and reforms outlined in the Heads of Agreement.
3. As per Clause 65 of the Heads of Agreement, the Parties commit that, in pursuing the National Reforms at Part 3 of this Bilateral Agreement, they seek to deliver upon the following Objectives:
   1. Equity and excellence – schools and education systems are equipped to provide all students with highly effective evidence-based teaching and equitable learning opportunities and support them to maximise their learning.
   2. Wellbeing for learning and engagement – schools take a structured approach to wellbeing for learning in a way which reflects their school and learning environment, and students have a sense of belonging, safety and engagement with their learning.
   3. A strong and sustainable workforce – the workforce is respected and continues to grow, and teachers and non-teaching school staff are supported to innovate and be at their best to ensure young Australians thrive in their education. A sustainable workforce means that the Australian community recognises the value teachers and school leaders bring to students, communities and the economy.
4. This Bilateral Agreement also reiterates Western Australia’s and the Commonwealth’s ambition and commitment to work together to contribute, along with other states and territories, to the national achievement of the national Objectives, Outcomes and Improvement Measures specified in the Heads of Agreement. While Western Australia and the Commonwealth are committed to this, Commonwealth funding to states and territories under the Act, this Bilateral Agreement or the Heads of Agreement is not conditional on the achievement of the Objectives, Outcomes or Improvement Measures in the Heads of Agreement or this Bilateral Agreement.

**Improvement Measures**

1. Western Australia commits to:
   1. the national Improvement Measures outlined in the Heads of Agreement and to pursuing an upward trend of improvement over the term of this Bilateral Agreement in these measures in the Western Australian context
   2. tracking and reporting its progress towards the Improvement Measures’ national targets in its Annual Implementation Report to the Commonwealth, where the Commonwealth does not separately have access to the data, consistent with reporting obligations in Part 5 of the Heads of Agreement.
2. Unless otherwise indicated in the guidelines issued for the Annual Implementation Report (see Part 4 of this Bilateral Agreement), the Commonwealth will collect Western Australia’s data for the purposes of national reporting from existing data collections.
3. As per Part 5 of the Heads of Agreement, the Commonwealth will publicly report Western Australia’s progress on the national Improvement Measures in an education reporting dashboard, subject to the Commonwealth seeking agreement from state and territory Education Ministers on the format and content of the dashboard.

**Part 2 — FUNDING**

**Required funding contributions**

1. Under section 22A of the Act, Western Australia must meet its funding contributions for the government and non-government sectors as a condition of receiving Commonwealth funding.
2. Western Australia’s funding contributions for the government and non-government sectors for 2025 onwards must be in accordance with section 22A of the Act, and will determine the default requirement if this Bilateral Agreement is terminated by either party.
3. Western Australia’s minimum funding contributions for the government and non‑government sectors agreed in this Bilateral Agreement are outlined in Table 1 below for each year from 2025 to 2029. The minimum funding contributions are expressed as a percentage of the Schooling Resource Standard (SRS) as defined in Part 3 of the Act.

*Table 1. Western Australia’s agreed minimum funding shares for the government and non-government sectors, 2025 to 2029*

| **Sector** |  | **2025** | **2026** | **2027** | **2028** | **2029** |
| --- | --- | --- | --- | --- | --- | --- |
| Government |  | 76.25% | 77.50% | 77.50% | 77.50% | 77.50% |
| Non-government |  | 20.00% | 20.00% | 20.00% | 20.00% | 20.00% |

1. The funding contributions outlined above have been agreed based on the following rationale:
   1. Western Australia’s final share for government schools in Western Australia will be at least 77.5 per cent of the SRS by 2026.
   2. Western Australia’s final share for non-government schools in Western Australia will continue to be at least 20 per cent of the SRS.
   3. Western Australia, on the basis of current state policy settings, will use the additional Commonwealth funding for government schools provided under this Bilateral Agreement to support government schools with the highest levels of need according to the State’s needs‑based funding arrangements (consistent with clause 78b of the Heads of Agreement), and towards Western Australia’s implementation of National Reform Directions in and for Western Australian government schools and National Enabling Initiatives as defined in Part 4 of the Heads of Agreement and Part 3 of this Bilateral Agreement.
2. Additional Commonwealth funding in this Bilateral Agreement (and in the Heads of Agreement as it applies to Western Australia) is to be interpreted as the additional Commonwealth funding share received by Western Australia under this Bilateral Agreement over and above the Commonwealth’s baseline share (20 per cent) of the SRS for public schools in 2024.
3. The Commonwealth’s additional funding for government schools will be provided through increasing the Commonwealth’s share from 20 per cent of the SRS in 2024 to 21.25 per cent of the SRS in 2025 and 22.5 per cent of the SRS in 2026 and for the remainder of the term of the Heads of Agreement, unless agreed otherwise by the Commonwealth and Western Australia.
4. As per clause 41 of the Heads of Agreement, Western Australia and the Commonwealth acknowledge that there are a range of external factors and services that may impact schools, students and their learning.
5. In December 2023, National Cabinet agreed that funding for foundational supports for students with disability is to be agreed through new Federal Funding Agreements, with additional costs split between the Commonwealth, states and territories and final details to be settled through the Council of Federal Financial Relations.
6. Disability reforms, including those related to changes to the National Disability Insurance Scheme (NDIS) including foundational supports, may impact Western Australia's school education services. Commonwealth funding under the Heads of Agreement and this Bilateral Agreement is not for these purposes. This Bilateral Agreement does not establish any Commonwealth requirements with respect to these reforms.
7. Clause 46 does not preclude Western Australia and the State’s non-government schools from using Commonwealth funding under the Heads of Agreement to provide and improve education services and supports for students with disability more broadly.

**Measurement of contributions**

1. For the purpose of this Schedule, Western Australia and the Commonwealth have agreed the costs that are measured towards Western Australia’s funding contribution requirements for the government and non-government sectors. In assessing compliance with section 22A of the Act, the National School Resourcing Board's (the Board) Terms of Reference will direct the Board to use this agreed methodology for measurement of Western Australia’s contribution, including as set out in clauses 49 and 86 of this Bilateral Agreement.
2. Consistent with the calculation of the SRS, the Western Australian funding contributions will be measured consistent with the existing Australian Curriculum, Assessment and Reporting Authority (ACARA) financial data reporting methodology for state Net Recurrent Income Per Student (NRIPS) for school years Year 1 minus 1 to Year 12, excluding funding for full fee-paying overseas students, along with the following additional funding types:
   1. Up to 4 per cent of the total SRS for the government sector each year for funding for costs contributing to the provision of education in schools, which may only include, at the State’s full discretion, direct school transport, capital depreciation, and kindergarten expenditure.
   2. All regulatory funding provided by the government for the government and non‑government sector for the purpose of Western Australia School Curriculum and Standards Authority and Department of Education’s regulatory functions.
   3. All funding for the National Reforms and National Enabling Initiatives outlined in Part 3 of this Bilateral Agreement or Part 4 of the Heads of Agreement.
   4. Any accounting standard changes, as agreed between the Commonwealth and state and territory Ministers for Education, that affect the measurement of recurrent funding where the NRIPS methodology has not been adjusted to negate this impact (e.g. AASB 16).
3. If the reported contribution for Western Australia for a year falls short of meeting the required contribution for a sector by an immaterial amount, this will not be considered non‑compliant with section 22A of the Act. An immaterial amount is less than or equal to 0.6 per cent of the total SRS for the sector, or another immaterial amount agreed by the Commonwealth Minister for Education for a year, which accounts for the timing constraint of state budget processes being finalised in advance of the year and the required contribution for the year being finalised at the end of the year following the annual School Census.
4. In assessing compliance with this Agreement, the Commonwealth Minister for Education will request the Board, through the Board's Terms of Reference for its review of section 22A of the Act, to take into account mitigating factors that have contributed to non-compliance. This may include, but is not limited to, fluctuations from year-to-year in funding which could be assessed through, for example, the application of a 3 year rolling average if funding has fallen below the required amount, unintended and unforeseeable budget pressures in the state budget process, financial accounting impacts (e.g. actuarial assessments and timing of expenditures due to reporting dates), and other unforeseeable circumstances (e.g. such as natural disasters).

**Part 3 — NATIONAL REFORMS**

1. The National Reform Direction activities agreed in this Bilateral Agreement align with the National Reform Directions of the Heads of Agreement, and Western Australia commits to supporting and advancing initiatives aligned to each of the National Reform Directions.
2. Approved authorities of non-government schools in Western Australia must adhere to their ongoing policy requirements (under subsections 77(2) and (2A) of the Act). As per clause 57 of the Heads of Agreement, approved authorities of non-government schools in Western Australia are required to cooperate with the Western Australian government in the implementation of this Bilateral Agreement.

**National Reform Directions**

1. Western Australia’s strategic directions for public schools, *Every student, every classroom, every day*, together with the existing initiatives aligned to these directions, provide a solid foundation for the State’s implementation of National Reform Directions for public schools.
2. Catholic Education Western Australia Limited (CEWA) recognises the individual needs and diversity of all students and, in particular, supports those who are the most vulnerable or disadvantaged. The Bishops’ Mandate for Catholic Education, *Quality Catholic Education* and *Catholic Education Commission Western Australia Strategic Initiatives 2030* share the vision for Catholic schools in Western Australia. They provide the context for CEWA’s approach to the National Reform Directions.
3. Independent schools in Western Australia are diverse, providing for students of all abilities and from all social and ethnic backgrounds. They provide quality schooling for a wide range of communities and may be affiliated with a particular religion or educational philosophy. The National Reform Directions are situated within this diversity of Western Australia’s independent schools’ sector.
4. Western Australia commits to the following actions to give effect to the National Reform Directions as outlined in the Heads of Agreement.

Equity and Excellence

1. Embed a whole-of-system and/or whole-of-school approaches that identify student learning needs early and provide tiered and targeted intensive supports, in line with evidence-based teaching and a ‘multi-tiered system of supports’ approach in Western Australian public schools from 2026. Key features of this are as follows:
   1. Continuing
      1. Support Western Australian public schools to implement multi-tiered systems of support by building on existing systems and practices, and informed by key Department of Education initiatives, including its Quality Teaching Strategy and Student Wellbeing and Care Strategy
      2. Support Western Australian public schools to identify and provide additional targeted support for students when required, through standardised assessments such as the On-entry literacy and numeracy assessments, Year 1 phonics check, and the National Assessment Program – Literacy and Numeracy (NAPLAN)[[2]](#footnote-3)
      3. CEWA to continue to support Catholic system schools to design and implement high quality, evidence based, contextually appropriate whole school pedagogies and approaches informed by *CEWA Vision for Learning* and *CEWA Strategic Wellbeing Framework*
      4. CEWA to continue to support the early identification of student learning needs and provision of multi-tiered support by reducing data gaps, particularly for equity cohorts, through system-wide standardised assessments and the development of data analytics systems which monitor learning growth. Tier 2 and 3 students to also be supported through intervention-based assessment
      5. The Association of Independent Schools of Western Australia (AISWA) to continue to provide and support independent schools with high quality professional learning and to assist with school improvement processes
   2. Undertaking the following additional effort
      1. Small group tuition will be provided to primary and secondary students in Western Australian public schools who are most in need
      2. Universal, targeted, or intensive system-level support will be provided to Western Australian public schools most in need. This includes instructional coaches to work with public schools to build teachers’ pedagogical capability, including the provision of targeted support with schools that need it the most
2. A Year 1 phonics check and an early years of schooling numeracy check (once available) in all mainstream schools, to support teachers and school leaders to identify student learning needs early. The key features of this are as follows:
   1. Continuing
      1. Mandatory On-entry literacy and numeracy assessments for all Western Australian public and CEWA school students in Pre-Primary (the year before Year 1), with follow-up assessment and intervention later in Pre-Primary and Year 1 for students who require it
      2. Make available On-entry assessments to non-government schools in Western Australia to undertake literacy and numeracy assessments in the early years of compulsory school
      3. Support from AISWA to independent schools in Western Australia to undertake on-entry literacy and numeracy assessments in the early years of compulsory school
      4. Implement a Year 1 phonics check in Western Australian public and CEWA schools
      5. Year 1 numeracy assessment in CEWA schools
      6. AISWA to continue to support the adoption of a Year 1 phonics and numeracy check as part of a regular program of screening for students from Pre-Primary in literacy and numeracy in independent schools, and identification and uptake of targeted interventions and support for students identified as requiring additional assistance
   2. Undertaking the following additional effort
      1. Make available to all Western Australian schools a numeracy check in the early years of schooling, once the national tool is available
      2. Participation rates of Western Australian public schools in a Year 1 phonics check and a numeracy check by the end of Year 1, will be reported annually
3. Initiatives that encourage student uptake of high-quality science, technology, engineering and mathematics (STEM) education opportunities. The key features of this are as follows:
   1. Continuing
      1. Support student engagement and capability in STEM through profession-led models such as the Western Australian Department of Education's Quality Teaching Strategy Lead Schools, which provide system-level STEM leadership and support to Western Australian public schools
      2. Through the State’s STEM Skills Strategy, continue to create strong STEM cultures in public schools to support and encourage young people to study STEM disciplines in school
      3. CEWA to continue to support engagement in STEM by CEWA schools through initiatives including STEM partnerships, networks and showcases in metropolitan and regional locations
   2. Undertaking the following additional effort
      1. Continue and expand Ngaparrtji Ngaparrtji – Two-Way learning, which supports Western Australian public schools to build partnerships with local Aboriginal communities to develop integrated, culturally responsive learning programs that connect Aboriginal knowledge with the mandatory STEM content in the Western Australian curriculum. Program expansion will focus on Western Australian public schools that have a large proportion of Aboriginal students

Wellbeing for learning and engagement

1. Initiatives that support connections between schools and other non-school services to support students to come to school ready to learn, for example through full-service school models. The key features of this are as follows:
   1. Continuing
      1. Foster existing partnership arrangements across Western Australian government agencies, such as with the Departments of Health and the Mental Health Commission, to encompass a tiered approach to student wellbeing and care in Western Australian public schools
      2. CEWA and AISWA to continue to facilitate linkages between Catholic system schools or independent schools and community services and resources to strengthen whole school approaches to supporting student wellbeing and early identification of student needs, supports and referral pathways
      3. CEWA to continue to support schools to undertake professional learning programs provide practical, trauma-informed classroom-based strategies to support better engagement and learning of all students through building strong relationships and promoting self-regulation in students
      4. CEWA to continue to provide scholarships for CEWA staff to complete the Professional Certificate in Wellbeing in Education
   2. Undertaking the following additional effort
      1. Design and trial place-based approaches to delivering a full-service schools model in at least 4 Western Australian public schools from 2026 to inform development of a full-service schools framework for expanding linkages between schools and other community, health and social services, and undertaking an independent review in 2028
      2. In implementing 60(b)(i) above, Western Australia commits to:
         1. ensuring at least one of the Western Australian public schools selected will be in an outer regional or remote location
         2. working with Western Australian public schools, local communities and service providers in the design and delivery of the place-based trials and development of a framework, with a particular focus on ensuring use of partnership and shared design approaches to meet the needs of Aboriginal and Torres Strait Islander students and families.
2. Structured initiatives that support wellbeing for learning and engagement. Key features will be as follows:
   1. Continuing
      1. Support student wellbeing for learning and engagement through the provision of access to school psychologists, counsellors and/or health nurses in Western Australian public schools
      2. Clarify the expectations of Western Australian public schools in relation to student wellbeing
      3. CEWA to continue to support Catholic system schools to strengthen whole school approaches to supporting student wellbeing for learning and engagement using *CEWA Strategic Wellbeing Framework*
      4. AISWA to continue to support independent schools to implement high efficacy whole school approaches to promoting and supporting student and staff wellbeing within the context of school improvement, including building workforce capacity to embed and sustain practice
   2. Undertaking the following additional effort
      1. Provide resources and support to enable Western Australian public schools to meet their obligations in relation to wellbeing. This includes development of a framework that clarifies the role of public schools in relation to student wellbeing and care and using this framework to guide the work with relevant agencies to implement the Western Australian Mental Health Commission’s Support to Schools Model of Care
      2. Expand Complex Behaviour Support Co-ordinators to increase system wide capability in supporting Western Australian public school students with the most complex needs, with a focus on regional and low Index of Community Socio‑Educational Advantage (ICSEA) schools where access to specialist services and supports is the most difficult
3. Initiatives which support student engagement in learning, for example greater student participation, attendance, inclusion and/or enhanced school-family engagement. Key features of this are as follows:
   1. Continuing
      1. Support greater student attendance and engagement in learning through the provision of highly effective, impactful teaching in Western Australian public schools, underpinned by initiatives such as the Western Australian Department of Education’s Quality Teaching Strategy and Student Wellbeing and Care Strategy
      2. Provide distance education to Western Australian public school students with significant barriers to engaging in mainstream schooling, and teachers that specialise in supporting students with significant disability, behavioural or medical and mental health needs
      3. Support Western Australian public schools’ continued implementation of the Western Australian Department of Education’s *Aboriginal Cultural Standards Framework*
      4. CEWA to continue to support student engagement in learning in Catholic system schools, particularly for educationally disadvantaged students, through initiatives including Aboriginal Families as First Educators, Aboriginal Students in Boarding Transition, Intensive English Centres, Virtual EAL/D and Virtual Schools Network
      5. CEWA to support schools to improve student attendance and engagement through system level support and resources, including the CEWA Attendance Strategy and CEWA Behaviour Guidelines
      6. CEWA to review the Transforming Lives Strategy and embed in current system strategy
      7. AISWA to continue to support the education of secondary aged students who are at risk of disengagement from mainstream education, such as through Curriculum and Reengagement in Education (CARE) independent sector schools
      8. AISWA and CEWA to continue to work in partnership with the Western Australian Department of Education to support independent and CEWA schools to refer students to access approved alternative options to full‑time school, where appropriate
   2. Undertaking the following additional effort
      1. Delivery of a student management system that allows for the better identification and management of students at risk of disengaging from school (across all sectors) to strengthen support for them to re-engage with school or approved alternatives to full-time school, such as vocational education and training
      2. Develop operating guidelines, tracking system and resources to ensure a contemporary participation (senior secondary) service to Western Australian public schools

A strong and sustainable workforce

1. Initiatives to develop, recognise, reward and/or deploy highly expert teachers, particularly in schools which need additional support, for example Highly Accomplished or Lead Teachers (HALT) or equivalents. Key features will be as follows:
   1. Continuing
      1. Increase Level 3 Classroom Teachers in Western Australian public schools
      2. Provide financial incentives and strategies to encourage HALTs (or equivalent/Level 3 Classroom Teachers) to work in hard-to-staff Western Australian public schools and public schools with the highest level of student need through trials in identified Western Australian public schools
      3. CEWA to continue to investigate the introduction of a HALT certification process in CEWA schools that elevates the teaching profession by acknowledging high quality teaching in the classroom and teacher leadership across the school
      4. AISWA to continue to support the adoption of lead teacher initiatives in independent schools, including HALT certification
   2. Undertaking the following additional effort
      1. Review the current Western Australian Department of Education Level 3 Classroom Teacher model against HALT certification criteria and identify actions needed to align Western Australia’s public school Level 3 Classroom Teachers to HALT certification
2. Access to high quality and evidence-based professional learning for teachers and school leaders and the provision of quality-assured curriculum resources that have been developed in partnership with the teaching profession. Key features will be as follows:
   1. Continuing
      1. Monitor the impact on student outcomes of regional Western Australian public schools that are participating in targeted teaching initiatives
      2. CEWA to continue to provide high quality professional learning for educators, including targeted strategies for equity cohorts (e.g. Aboriginal students, students with disability, students for whom English is an additional language/dialect, and students from regional, rural and remote areas)
      3. CEWA to provide high quality professional learning and resources through the Early Childhood Numeracy project
   2. Undertaking the following additional effort
      1. Scale up the elements of the Western Australian Department of Education’s Quality Teaching Strategy in public schools with a focus on instructional coaching and highly effective teaching practices. This includes Leading Cultures of Teaching Excellence professional learning to support principals to lead a high performance and development culture within their schools. It also includes continuing to build resources and illustrations of effective practice across a range of school settings and key areas of instructional practice, including literacy and numeracy, STEM and evidence-based classroom strategies for engaging students in learning. System-based Instructional Coaches will support this work and build school-level capacity to implement whole-school instructional improvement models
      2. Western Australia will progress adopting and adapting the Australian Curriculum version 9 within the Pre-Primary to Year 10 Western Australian Languages Curriculum, and will provide professional learning and resources to support implementation by schools in a phased approach
3. Initiatives to strengthen teacher and school leader wellbeing, for example actions to support safe and respectful schools, strengthen Aboriginal and Torres Strait Islander cultural safety, and reduce teacher and school leader workload. Key features will be as follows:
   1. Continuing
      1. Working collaboratively across all sectors to identify common opportunities to reduce teacher and school leader workload
      2. Review Western Australian Department of Education operational policies for Western Australian public schools as policies are renewed through a workload reduction lens
      3. CEWA to continue to support staff wellbeing through *CEWA Strategic Wellbeing Framework*
   2. Undertaking the following additional effort
      1. The Western Australian Department of Education will establish a Workload Intensification Taskforce. The Taskforce will have a specific focus on classroom support, complex behaviour management and professional learning. The purpose will be to identify opportunities that will support Western Australian public school leader and teacher workloads
4. Implement or expand initiatives to increase teacher attraction and retention, including those that encourage students to take up a career in teaching and increase the diversity of the teacher workforce, especially by increasing the number of First Nations educators. Key features will be as follows:
   1. Continuing:
      1. Consider ways to strengthen alignment of current Western Australian Department of Education policies and frameworks for Western Australian public schools with the *National Teacher Workforce Action Plan* and *Strong Beginnings: Report of the Teacher Education Expert Panel*
      2. Work in partnership across sectors, and with the Teacher Registration Board of Western Australia and local universities, to promote greater teacher workforce diversity
      3. The Western Australian Department of Education, CEWA and AISWA to continue supporting initiatives in public, CEWA and independent schools arising from the *National Teacher Workforce Action Plan* and *Strong Beginnings: Report of the Teacher Education Expert Panel*
      4. CEWA to enact its Aboriginal Employment Strategy which includes strategies to support Aboriginal educators
   2. Undertaking the following additional effort
      1. Provide attraction and retention measures to increase and maintain the Western Australian public education teaching workforce in regional and learning areas of need
      2. Provide supported pathways for career changers to transition to a teaching career in Western Australian public schools through completing initial teacher education (ITE), with particular reference to areas of need and diversity groups including First Nations people, people with disability and those from culturally and linguistically diverse backgrounds
      3. Develop and deliver culturally appropriate learning modules, including training to support the development of Aboriginal employees in Western Australian public schools, including Aboriginal and Torres Strait Islander Education officers
      4. Support Western Australian public school teachers to return to the classroom following an adverse event
      5. Support pre-service teachers in Western Australian public schools to complete ITE qualifications, including through exploring employment-based pathways
      6. Continue to support and build on the success of the Western Australian Department of Education’s Aboriginal Languages Teacher Training program, including the development of resources in additional languages
5. Implementation of the national reforms directions as outlined further in Table 2.
6. Reporting on the activities undertaken in respect of the above national reform directions will be undertaken through an Annual Implementation Report, as outlined in Part 4. For the avoidance of doubt, reporting on reforms will be limited to the actions described as ‘additional effort’ and will exclude those described as ‘continuing’.

**National Enabling Initiatives**

1. Western Australia commits to the following actions to give effect to the National Enabling Initiatives, as outlined in the Heads of Agreement, and fulfil commitments as per Schedules B and C of the Heads of Agreement:
   1. Contribute to collective work on the Review of the SRS base and loadings calculation methodology.
   2. Contribute to the implementation of the Unique Student Identifier (USI) to ensure all Western Australian school students receive a USI:
      1. It is acknowledged by both Parties that the national system of unique student identifier (USI) in schools will link to, and not replace or interfere with, the existing Western Australian Student Number.
   3. Contribute to collective work to understand and provide advice to Education Ministers on:
      1. socioeconomic diversity, its impact on schools and student learning and approaches to addressing these impacts
      2. school attendance, its impact on learning and mechanisms to advance evidence-based approaches to addressing non-attendance, including school refusal.
   4. Contribute to collective work to inform a Review of the Measurement Framework for Schooling in Australia to ensure it remains a relevant tool. This may include student level outcome data, disaggregated data and information to inform possible new and updated measures. The review’s Terms of Reference are to be agreed by Education Ministers Meeting and will include consideration of the costs and benefits of:
      1. a new measure of student engagement
      2. a new equity in learning gain measure, to enable measurement of student learning growth
      3. national measures of access, participation and outcomes for students with disability to establish a better understanding of the education experiences and outcomes of schooling for students with disability
      4. extending the Australian Teacher Workforce Dataset to ensure that comprehensive data, based on teacher registration, is collected to better understand workforce trends including early career retention and diversity, and extending the Australian Teacher Workforce Survey to capture data on out-of-field teaching.
   5. Development of an early years of schooling numeracy check to support teachers to assess their students’ numeracy skills and identify and respond to students who need tailored support.
2. As per clause 89 of the Heads of Agreement, Western Australia will contribute to the development of a national Project Plan for each of the National Enabling Initiatives in clause 88 of the Heads of Agreement.
3. The provision of any information by Western Australia as part of its contribution to the delivery of the National Enabling Initiatives will be consistent with the Project Plans to be agreed by Education Ministers Meeting (EMM), the Reporting Requirements in Part 4 of the Heads of Agreement and clause 98 of the Heads of Agreement, which stipulates that as far as practical, reporting requirements will leverage existing reporting processes and data sources and, unless explicitly stated otherwise, will not impose any additional burden on schools.
4. Western Australia will not be penalised in any way for failing to achieve milestone deadlines in relation to the National Enabling Initiatives in the Heads of Agreement or this Bilateral Agreement if such non-achievement was due to delayed or non-achievement of other milestones or dependencies outside of Western Australia’s control.
5. As set out in clause 92 of the Heads of Agreement, the cost of National Enabling Initiatives will be met by Parties according to the cost sharing principles, unless otherwise agreed by Education Ministers. For joint projects, EMM typically utilises a population-based funding formula to determine jurisdictional funding propositions. For the avoidance of doubt, Western Australia will not need to contribute more towards jurisdictions’ share of the national cost of a National Enabling Initiative than is proportional to Western Australia’s share of the total national school student population, unless otherwise agreed by Western Australia’s Minister for Education.
6. Western Australia’s obligations with regards to the National Reform Directions and National Enabling Initiatives specified in this Bilateral Agreement and the Heads of Agreement are fully dependent of Western Australia receiving the additional Commonwealth funding agreed with the Commonwealth under this Bilateral Agreement.

**Implementation**

1. In committing to the above reforms, Western Australia commits to the actions and milestones set out in Table 2.
2. Western Australia undertakes to co-operate with the non-government school sector in Western Australia in the implementation of their reforms outlined in this Bilateral Agreement as follows:
   1. Continuing existing consultation channels and representation of the sectors, for example through the Western Australian Cross-Sectoral Partnership Forum and Committees of the Western Australian School Curriculum and Standards Authority.
3. In accordance with subsection 77 (2A) of the Act, non-government approved authorities are required to cooperate with their local state or territory government in the implementation of this Agreement.
4. The non-government sector in Western Australia, as per clause 57 of the Heads of Agreement, should cooperate with the Western Australian Government to implement the National Reform Directions and National Enabling Initiatives. Activities against National Reform Directions undertaken by the Western Australian non-government sector will be included in reports by the non-government representative bodies provided to the Australian Government as set out in Part 5 and Schedule E of the Heads of Agreement.
5. The Commonwealth will not impose financial or other sanctions on Western Australia for a failure by the Western Australian non-government school sector to cooperate with this Bilateral Agreement, as per clauses 86 and 87 of the Heads of Agreement. Nor will the Commonwealth impose sanctions on the non-government school sector for a failure of Western Australia to cooperate with them in the implementation of this Bilateral Agreement.

**National Reform Directions Implementation Milestones**

Note: This Table only includes the reforms listed as ‘additional effort’

*Table 2 – Western Australia bilateral school reform milestones*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Reform and Milestones** | | **Sector** | | | **Timing** | |
| **Reform A – Equity and Excellence** |  | | | | |  |
| **Provide universal, targeted and intensive support** |  | | | | |  |
| * Small group tuition will be provided to students in Western Australian public schools who are most in need. | | Public | | | From 2025 | |
| * Universal, targeted or intensive system-level support will be provided to Western Australian public schools most in need. | | Public | | | From 2025 | |
| **Implement or expand -Year 1 phonics and early years of schooling numeracy checks to all schools** | | |  |  | | |
| * Make available to all schools a numeracy check in the early years of schooling, once the national tool is available. | | All sectors | | | When the national tool is available | |
| * Participation rates of public schools in a Year 1 phonics check and a numeracy check by the end of Year 1, will be reported annually. | | Public | | | From 2025 for a phonics check. Numeracy check data to commence once the national tool is available. | |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Initiatives that encourage student uptake of (STEM) education opportunities** |  | | |  | | |
| * Continue and expand Ngaparrtji Ngaparrtji – Two-Way learning. | | Public | | | | From 2025 |
| **Reform B – Wellbeing for Learning and Engagement** |  | | | |  | |
| **Expanding the full-service school model** |  | | | |  | |
| * Trial place-based approaches to delivering a full-service schools model in at least 4 public schools from 2026 to inform development of a full-service schools framework for expanding linkages between schools and other community, health and social services, and undertaking an independent review in 2028. | | Public | | | | From 2026 (with planning from 2025) |
| **Initiatives that support wellbeing for learning and engagement** | | |  |  | | |
| * Provide resources and support to enable public schools to meet their obligations in relation to wellbeing. | | Public | | | | From 2025 |
| * Expand Complex Behaviour Support Co-ordinators to increase system wide capability in supporting public school students displaying the most complex needs. | | Public | | | | From 2025 |
| * Delivery of a student management system that allows for the better identification and management of public school students at risk of disengaging from school. | | Public | | | | From 2026 |
| * Develop operating guidelines, tracking system and resources to ensure a contemporary participation (senior secondary) service to public schools. | | Public | | | | From 2025 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Reform C – A Strong and Sustainable Workforce** | | |  | | |  | |
| **Level 3 Classroom Teachers and Highly Accomplished and Lead Teacher (HALT)** | | |  | | |  | |
| * Review the current Western Australian Department of Education Level 3 Classroom Teacher model against HALT certification criteria and identify actions needed to align Level 3 Classroom Teachers to HALT certification. | | Public | | | | | From 2025 |
| **Evidence-based Teaching Practices and Quality Assured Curriculum** |  | | |  | | | |
| * Scale up the elements of the Western Australian Department of Education’s Quality Teaching Strategy with a focus on instructional coaching and highly effective teaching practices. | | Public | | | | | From 2025 |
| * Western Australia will progress adopting and adapting the Australian Curriculum version 9 within the Pre-Primary to Year 10 Western Australian Languages Curriculum and will provide professional learning and resources to support implementation by schools in a phased approach. | | All sectors | | | | | From 2026 |
| **Actions to reduce teacher and school leader workload**. |  | | |  | | | |
| * The Western Australian Department of Education will establish a Workload Intensification Taskforce. The Taskforce will have a specific focus on classroom support, complex behaviour management and professional learning. The purpose will be to identify opportunities that will support school leader and teacher workloads. | | Public | | | | | From 2025 |
| **Increase teacher attraction and retention** | |  | | |  | | |
| * Provide attraction and retention measures to increase and maintain the public education teaching workforce in regional and learning areas of need. | | Public | | | | | From 2025 |
| * Provide supported pathways for career changers to transition to a teaching career in public schools through completing an initial teacher education (ITE) program, with particular reference to areas of need and diversity groups including First Nations people, people with disability and those from culturally and linguistically diverse backgrounds. | | Public | | | | | From 2025 |
| * Develop and deliver culturally appropriate learning modules, including training, to support the development of Aboriginal employees in public schools, including Aboriginal and Torres Strait Islander Education officers. | | Public | | | | | From 2025 |
| * Support teachers to return to the classroom following an adverse event. | | Public | | | | | From 2025 |
| * Support pre-service teachers to complete initial teacher qualifications, including exploring employment-based pathways. | | Public | | | | | From 2025 |
| * Continue to support and build on the success of the Western Australian Department of Education’s Aboriginal Languages Teacher Training program, including the development of resources in additional languages. | | Public | | | | | From 2025 |

**Part 4 — REporting REquirements**

**Requirements for annual reporting to the Commonwealth**

1. The following clauses set out the annual reporting arrangements for Western Australia for a year (Year T).
2. As set out in Part 5, clause 100 of the Heads of Agreement, Western Australia will also be required to ensure full and accessible information on their needs-based funding arrangement is publicly available, in line with subsection 78(5) of the Act.

**Annual Funding Report**

1. The Commonwealth will provide Western Australia with a Funding Estimation Tool in January Year T+1 prior to Western Australia’s annual report with the final Schooling Resource Standard (SRS) data for Year T for the purpose of the Board’s review of Western Australia’s compliance with subsection 22(A) of the Act.
2. As outlined in Part 5, clause 101 of the Heads of Agreement, the Western Australian Minister responsible for school education, or their delegate (i.e. the Director General (or equivalent) of the Department responsible for school education), must provide an Annual Funding Report to the Commonwealth Education Minister, or their delegate, such as the Departmental Secretary, for each calendar year of the Bilateral Agreement.
3. Western Australia must provide its Annual Funding Report for Year T to the Commonwealth no later than 30 November Year T+1 (i.e., 30 November of the following year).
4. For the avoidance of doubt, the Annual Funding Report must set out the following:
   1. The total amount of funding allocated by Western Australia for government schools in Western Australia for Year T as measured in line with clause 49 of this Bilateral Agreement.
   2. The total amount of funding allocated by Western Australia for non-government schools in Western Australia for Year T as measured in line with clause 49 of this Bilateral Agreement.
   3. Total full time equivalent enrolments for Year T, relating to the amounts in (a) and (b) above.
   4. The amount for each funding type set out in clause 49 of this Bilateral Agreement.
   5. The amount of funding consistent with the specified NRIPS methodology, at a sector level, not at an individual school level.
5. For the avoidance of doubt, each amount included in the Annual Funding Report must have been:
   1. allocated by the Western Australia government for schools for Year T (including centralised funds allocated by the department for schools and funds allocated for schools that are not spent within Year T but are spent within the remainder of the financial year or subsequent years by schools), or approved authorities, or
   2. allocated to schools by approved authorities for schools, and
   3. not counted towards another reporting year for the purposes of this Agreement, and
   4. not counted towards another Commonwealth-State agreement, without the explicit consent of the Commonwealth, and
   5. this clause does not prevent Western Australia also including budgeted amounts in its report.
6. Each amount included in report for a sector must have been allocated or expended by that sector. Note: this means Western Australia cannot count funding allocated or expended against the allocation or expenditure of another sector.
7. Each amount included in the report must be net of any Australian Government funding.
8. The Annual Funding Report provides for an optional statement explaining:
   1. any material variances (positive or negative) in the total amount of Western Australia’s funding contribution that is between Year T and Year T-1 T for:
      1. government schools in Western Australia
      2. non-government schools in Western Australia
   2. any adjustments to Western Australia’s funding contribution (i.e. timing adjustments) outside of the specified NRIPS methodology.
9. For each amount, the report must include evidence that the amount has been certified and is consistent with the agreed methodology in clause 49 of this Bilateral Agreement by one of the following:
   1. The Auditor-General of Western Australia.
   2. An independent qualified accountant.
   3. An independent qualified accountant engaged by ACARA for NRIPS funding.
   4. The Director General or equivalent of the education portfolio for Western Australia, but only up to 0.1 per cent of the SRS for Western Australia for all reported funding.
10. The Annual Funding Report may also provide an explanation and supporting evidence for the Board’s consideration of any shortfall between the total amount reported for Year T and the agreed funding contributions for Year T in clause 40 of this Bilateral Agreement.
11. The Commonwealth will provide Western Australia’s Annual Funding Report to the Board for assessment of Western Australia’s compliance for Year T with section 22A of the Act, including any funding requirements specified in this Bilateral Agreement.
12. The Commonwealth may request additional information from Western Australia on behalf of the Board, to be provided within 21 days. If Western Australia does not provide information or advice in this timeframe, the Board will make an assessment based on the information and evidence available.
13. Western Australia will have an opportunity to provide further information for the Board’s consideration following their receipt of the Board’s draft findings.
14. The Commonwealth may request additional information where reasonably practicable to support effective monitoring of compliance related to performance and reporting. Such requests will be consistent with clause 98 of the Heads of Agreement which stipulates that, as far as practical, reporting requirements will leverage existing reporting processes and data sources and, unless explicitly stated otherwise, will not impose any additional burden on schools.

**Annual Implementation Report**

1. As outlined in Part 5, subclause 101(a) of the Heads of Agreement, the Director General or equivalent of the education portfolio for Western Australian must provide an Annual Implementation Report to the Secretary of the Australian Government Department of Education for each calendar year of this Bilateral Agreement, for the purpose of assessing compliance with section 22(2)(c) of the Act.
2. The template for the Annual Implementation Report is found at Attachment A of this Bilateral Agreement.
3. The Annual Implementation Report for a calendar year is required by 30 November Year T+1 (i.e. 30 November of the following year), or a date as agreed by the Commonwealth and Western Australia.
4. The Annual Implementation Report must include:
   1. progress towards agreed reform activity, as outlined in Table 2 of this Bilateral Agreement for the National Reform Directions
   2. how much additional funding from the Commonwealth was directed to implement or augment the National Reform Directions
   3. information on how the implementation of each of the National Reform Directions has been targeted to priority equity cohorts (as defined in the Heads of Agreement) and, where relevant, to schools which need additional support
   4. progress towards improvement measures, only where not currently reported to the Commonwealth.
5. For the avoidance of doubt, Western Australia’s Annual Implementation Report should focus on government school implementation and improvement measures, noting that, as per clause 104 in the Heads of Agreement, non-government representative bodies will be required to provide an Annual Implementation Report for Year T to the Commonwealth for each calendar year by 30 November Year T + 1.

**SIGNATURES**

|  |  |  |
| --- | --- | --- |
| **Signed** *for and on behalf of the Commonwealth of Australia by* |  | **Signed** *for and on behalf of  Western Australia by* |

**Attachment A: Annual Implementation Report template**

**Purpose of this reporting template**

This Annual Implementation Report reporting template contributes to achieving the transparency and accountability commitments under the Better and Fairer Schools Agreement. Western Australia will fill in the Annual Implementation Report annually and report it to the Australian Government Department of Education in relation to the government school sector; non-government representative bodies will also be required to fill in their own template (see Schedule E of the Heads of Agreement).

**National Reform Directions**

Western Australia is required to fill in the below table outlining their implementation of National Reform Directions (in relation to the government school sector) where there is allocation of additional Commonwealth investment. If work is already underway in Western Australia in relation to a National Reform Direction, then Western Australia can choose to report qualitative information on the progress of the National Reform Direction.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **National Reform Directions** | **Allocation of additional Commonwealth investment** | **Description of local implementation** | **Outline the focus on priority equity cohorts and schools needing additional support (where applicable)** | **Details of qualitative or quantitative impact** |
| [For example]  Structured initiatives that support wellbeing for learning and engagement, for example in-school wellbeing coordinators or access to School Counsellors, psychologists, mental health workers and/or youth health nurses. | How much of the Commonwealth additional investment is being targeted to this work. |  |  | For example, ratio of wellbeing functions to students, where applicable. |
| [National Reform Direction] |  |  |  |  |

**Specific National Reform Direction Implementation**

|  |  |  |
| --- | --- | --- |
| **National Reform Direction** | **20xx Update** | **Evidence/Caveats/Background Information** |
| Phonics and early years numeracy check school participation rate (i.e. not student level), |  |  |
| Number of Highly Accomplished and Lead Teachers or equivalent |  | For example, a certain percentage being deployed in schools which need additional support. |

**Improvement Measures**

Western Australia is required to fill in the following table outlining their progress against identified agreed Improvement Measures, only where data is not available at the Commonwealth level:

|  |  |  |
| --- | --- | --- |
| **Improvement Measure** | **20xx Update** | **Evidence/Caveats/Background Information** |
| [Jurisdiction-level Improvement Measure] |  |  |
| [Identified jurisdictional target, where target already exists (if applicable)] |  |  |

1. Remoteness as per Australian Statistical Geography Standard. Australian Bureau of Statistics: Schools, Australia 2023. [↑](#footnote-ref-2)
2. Year 1 phonics check as part of the Western Australian Department of Education’s Phonics Initiative. [↑](#footnote-ref-3)